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THE TRUTH ABOUT THE RAILROADS

Howard Elliott

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[illegible] ELLIOTT

BOSTON AND NEW YORK
HOUGHTON MIFFLIN COMPANY
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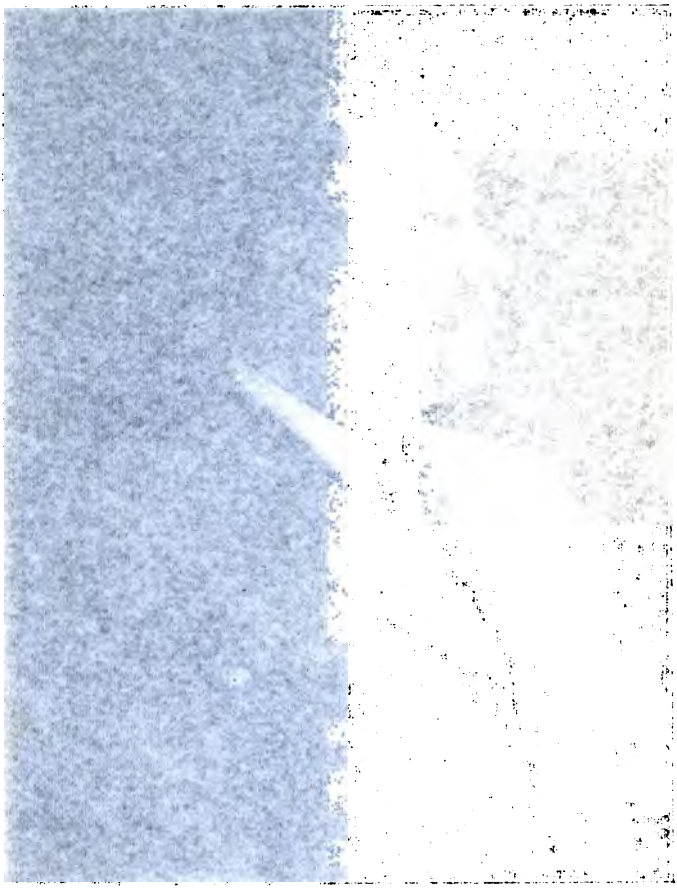

THE TRUTH ABOUT THE RAILROADS

BY

HOWARD ELLIOTT

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PUBLISHERS' NOTE

THE several chapters of this book were first written as addresses to be delivered on various occasions and in various places. The publishers asked Mr. Elliott's permission to make a book out of them, believing that such a volume would be useful in the consideration of the railroad situation in the United States. In the preparation of the addresses for publication references to particular times and places have been for the most part omitted, but in some instances these have been retained because they are applicable to general conditions existing to-day all the country over.

4 PARK STREET, BOSTON,
October 15, 1913.

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INTRODUCTION

THE time has now come for an impartial and serious consideration by the people at large, as to whether it might not be better for their interests individually and collectively, and for all business interests of the country, to give the railroads a breathing-spell, to eliminate some of the useless and unnecessary restrictive law under which they are compelled to work, and to permit them to solve the very serious problem of giving the public what it wants in railroad service and railroad facilities, by encouraging friendly relations and friendly discussion with the public, rather than to have constant friction and bickering.

For many years, and particularly in the last few, there has been agitation about the so-called railroad question, or problem. Through lack of complete information about the railroads there has arisen some antagonism toward them, and it is important to explain the

real situation, because the American people, when they know the truth, are not likely to be unjust to any one class of people, or to any one business.

Upon the one hand there is a critical public. Upon the other, the railroads are struggling with forces which are causing rates to remain stationary or to decline, causing wages to rise or to remain stationary, bringing demands from a prosperous and luxurious people for increasingly expensive facilities and service, and causing taxation to rise at an alarming rate. These four forces are all at work reducing the margin between income and outgo and making it more and more difficult for the owners of railroad properties to keep their lines in suitable condition to carry on the business of the country, and to obtain a return commensurate with the risk of the business and sufficient to attract further investment.

If rates had not been fair and service adequate, neither agriculture nor commerce would have shown such gratifying gains as were made during the census period ending in 1910. If it

were not a fact that since they were constructed railroads have steadily lowered rates, while increasing the extent and raising the quality of their service, and at the same time steadily increasing expenditure and work for the development of the country, America to-day would not be what it is. Its development would have been retarded and its progress slow.

To-day, however, the railroads are a big target at which many shoot. Out of 92,000,000 people relatively few in the regular course of their lives and business come closely enough into contact with railroads to know railroad officers or understand the business. Those who do not must depend upon casual information — what politicians say, what magazines print, what appears in the daily press — for their knowledge about railroads. The arguments hurled at railroads by some of the magazines are often more calculated to increase circulation than to educate the American people as to the actual facts. Many of the charges which have been believed by thou-

sands of people are not based on accurate knowledge.

Railroad officers have been less active than they should have been in keeping in touch with the public. The railroad stockholders have not realized how strong the forces affecting their properties are. This condition has changed and the modern railroad-owners, officers, and employees should and do realize that it is necessary to maintain cordial and friendly relations with the public and by their personal efforts and examples to give full information about the business, and to build up a constantly better feeling toward the transportation machine of the United States.

It is, no doubt, true that little things—the abruptness of an agent or a trainman, a lack of proper courtesy, inattention to complaints of the public, dilatoriness — often cause quite as much criticism from the public as things of greater importance. This irritation and criticism can be reduced by adjusting the relations between the railroads and the public at the point of contact. For example, the passenger

men and their representatives during 1913 came into touch with each one of nearly nine hundred million users of railroads. In each of nine hundred million instances some man had a chance to make or mar the reputation of his line and to affect just a little the attitude of the people toward the transportation business. Nine hundred million instances of courtesy and attention, or nine hundred million passengers completing a journey with a feeling that the railroad was interested in their comfort or pleasure, would constitute a great leverage, moving public sentiment into better channels.

Not only the passenger man but railroad men in general can build up cordial relations in this way, and have an opportunity to place before the people the real facts about the railroad business of this country, which will show a majority of the American people — who are unfair only because they do not fully understand this question — that the railroads cannot indefinitely provide at rising costs the increasingly good service which the public demands and should have, and survive, unless

there is more reason in directing and controlling the four forces which are influencing rates, wages, demands, and taxes.

There is plenty of information at hand about the railroad business. No form of business in the United States is conducted so openly, and in none are the facts and figures so available. This information does not reach the everyday citizen, who is interested but lacks ready sources of information, to the degree that it should. Every railroad man can do a great work by seeing that it does reach him.

The press of the United States reaches the people. The press can help the relations between the public and the railroads by giving correct information, and, if approached properly, will usually manifest a fair attitude. Railroad men have a responsibility in this respect, and, with their more intimate knowledge of the business, they can in many ways help the newspapers to avoid misstatements and false conclusions. In fact, this is a legitimate and patriotic line of work for the railroad stockholder, officer, and employee.

The railroad is working hard to do its part, but it cannot accomplish the impossible, and it needs the careful thought, judgment, and help of men in business life, who need to have the railroads grow and improve. The railroad system of the United States is a great piece of commercial machinery, essential to every one in this complicated modern civilization; without this piece of machinery, there could not be the volume of business — agricultural, manufacturing, and commercial — that there now is. The magnitude of these transactions is so great that this piece of commercial machinery must be kept in the very best order, and its capacity must be increased all the time. Without this, much business could not exist; on the other hand, without the business, this piece of commercial machinery would be idle and rust. The relation between the two is very close. Injustice and unfair treatment of either by the other is sure to react, and this fact is a much safer insurance against any injustice on the part of railroads than attempting to manage by legislation all of their affairs in great detail.

To-day on all important questions but one the railroad-owner is directed by acts of Congress and of state legislatures and by the orders of commissions and bureaus. He has little control over the rates, over the hours of labor, over the rules for the conduct of the business in which his money is invested, over the taxes he shall pay. There is reserved to him the one duty and responsibility of finding money to pay the bills. In order to make clear what this interference with the details of management really means, a commonplace illustration may be used.

Suppose, for example, that some men are engaged in the business of hauling freight of all kinds from the water-front to the various parts of a city. The owners and chief managers are doing the best they can to deliver coal, merchandise, and other freight promptly and cheaply, though every pound must be hauled with difficulty over slippery streets and up heavy grades. Suddenly, however, a large number of men appear and begin to tell the owners and managers how to run their busi-

ness. None of these men have any financial interest in the business of transporting merchandise by wagon, and few of them have any practical knowledge of it. One man says, "I have been looking at your wagons and their beds are not the right height from the ground, and you must change them. I notice also that the steps are put on wrong and the buckles of your harnesses are not of the right character. You must fix these things." Another man says, "The lanterns your teamsters carry are not suitable. You must buy a much more expensive kind and see that they are carried whether they are needed or not." Another says, "You must not use a certain lead horse any more because he is not suited to the business." Another says, "I noticed that you were carrying a calf on one of your wagons. In such cases you must get your wagon from the waterfront to destination within one hour, and it must be moved at a speed of not less than ten miles per hour." Another says, "In our part of the city your wagons must not move faster than four miles an hour, and you must stop

them at every street-crossing." Another says, "The city authorities have decided that you must reduce all your charges 25 per cent." And still another says, "I represent a committee that has decided that your sheds and barns are not of the right type and you must tear them down and build new ones." Meanwhile some of the stablemen and others have come to the managers and owners saying that they have decided not to do any more work unless their pay is increased 25 per cent. Naturally the owners and their managers are somewhat confused and discouraged at all this interference and are tempted to say, as the fiddler did in the mining camp, "Please do not shoot, for I am doing the best I can."

Now this all sounds rather ridiculous when it is applied to the man hauling coal and merchandise in the city, but it is exactly what is going on all the time in the United States today in relation to the railroads; only there is much more of it, because the Federal Government and all of the States are making rules and regulations about the kind of equipment

to be used, the character of locomotive headlight, the kind of boiler in the engine, the speed of live-stock trains, the speed of trains in cities, the rates to be charged, the kind of buildings to be put up, and the labor unions are at the same time making demands for increases in pay.

Lincoln said the country could not endure "half slave and half free," and it is a grave question whether the railroads can continue to meet the demands of the people and be the efficient instruments that they should be, if owned by private individuals, but in all important matters of management, except finance, practically directed by governmental authority.

The American people are strong enough to have any kind of railroad ownership and management that they want, and if they want government ownership they can have it. I submit, however, that the management of business enterprises in this country by the Government has not given evidence of thoroughness, efficiency, and economy equal to

that displayed by private individuals, and that it is not to the best interest of this country to have government-owned and government-managed railroads.

So I repeat, those in the railroad business, both owners and employees, have a greater responsibility than ever before; not only the responsibility of doing their best, whatever may be their position in the service, but the responsibility of telling the people the real facts — the truth — about the railroad business, the responsibility of using their opportunities to aid the nation by helping the movement to have a greater proportion of our population live in the country than in the cities, the responsibility of directing the attention of the tourist to the beauties of America, so that the money now going to foreign lands will remain here and help to increase the balance of trade in our favor, and last, but not least, the responsibility, which to-day is a great one to every American and to every railroad employee, of encouraging the practice of those habits of industry, thoroughness, and thrift,

which have not been so common in the last twenty-five years as they were when our country began its work of becoming a great nation.

The average American citizen has good common sense. He lives in the best country in the world, has the best institutions, by far the best and cheapest rail transportation in the world, and if the individual will exercise his common sense there is no limit to the progress that this great nation will make. If he does not, there will be increasing danger of a change in our institutions, so that the railroads and corporations, which are and should be powerful instruments for good, will be crippled, and later on the foundations of the Government itself will be shaken.

Every patriotic individual should do his part to counteract the foolish talk and insidious influences that are at work in the land and should exercise his mental and moral strength.

"Say not the days are evil — who's to blame?
And fold the hands and acquiesce — O shame;
Stand up, speak out — and bravely — in God's name."

It is in this coöperative and hopeful spirit, then, that the following addresses on the railroad business in America are now submitted with the hope that they will throw some light on a subject most important to the future welfare of the United States.

THE TRUTH ABOUT THE RAILROADS

THE TRUTH ABOUT THE RAILROADS

I

COÖPERATION BETWEEN THE RAILWAY-OWNER, THE RAILWAY EMPLOYEE, AND THE RAILWAY-USER[1]

COÖPERATION is defined as "the association of a number of persons for their common benefit," and my purpose is to show the absolute necessity, if prosperity and progress are to continue, of coöperation between the railway-owner, the railway employee, and the railway-user.

In order to consider this question, a brief statement must be made showing what the railway system of the United States is to-day, what it represents, the work it does, and the work it must prepare to do if safe and ade-

[1] Address delivered at the Montana State Fair, Helena, Mont., September 26, 1910.

quate transportation is to be furnished to the people of the United States. The railways of the country, in their present form, have been built since the close of the Civil War, or in less than fifty years, and are the wonder and admiration of students of the transportation problem who come here from other countries. There are 234,182 miles of railway, and more than 340,000 miles of track in this country, as compared with a trifle less than 300,000 miles of railway in all the other countries of the world combined. There are nearly 58,000 locomotives; more than 45,000 passenger-train cars; nearly 2,200,000 freight- and service-cars. On these tracks, and with these engines and cars were run in the year ending June 30, 1909, freight-trains for 560,602,557 miles, and passenger-trains for 491,903,107 miles, or an average of 2,883,577 miles every day in the year. This is equal to a trip around the world at the equator 116 times each twenty-four hours.

These trains handled in the year ending June 30, 1909, 217,756,776,000 tons of freight one mile and 29,452,000,000 passengers one

mile. The significance of these figures will be better understood by stating that they are the equivalent of hauling a ton of freight 2419 miles for every man, woman, and child in the United States, and giving each of them a ride on a passenger-train of 327 miles. The number of tons of freight moved over each mile of railway during a year is the measure of the freight work performed for the country by the railways. This was —

In the United States.....969,000 tons one mile in 1909
In England.....530,000 tons one mile in 1908
In Germany.....880,000 tons one mile in 1908
In France.....497,000 tons one mile in 1907

— showing that the American railways are furnishing a greater service per mile of railway than the older countries.

Since 1889 the miles of railway in the United States have increased 52.7 per cent; the passengers carried one mile on those railways have increased 154.8 per cent, and the tons of freight carried one mile 224.3 per cent; the number of employees 116.2 per cent, and the taxes 230.8 per cent.

With ninety million busy people in this

country the next twenty years must see a constant addition to the railway facilities of the country if the commerce is to be moved satisfactorily, and the railway-user must see to it that the railway-owner has sufficient margin to justify the enormous additional investment that must be made in order to provide the needed transportation.

The passenger-trains of the United States earned on the average for the year ending June 30, 1908, $1.27 per train-mile, and the average cost per train-mile for expenses, not allowing anything for taxes, using the total freight- and passenger-train-miles, was $1.47. From this it is plain that there is no margin in the passenger business for taxes, interest, and dividends, and that passenger-train service, as a whole, is furnished without profit, and often to the detriment of the freight business, which must be moved promptly for the development of the country.

This country, as it grows in population and wealth, wants more and better passenger-train service and better stations, just as it wants

more and better hotels and more and better street-paving and lighting and more and better restaurants; but in the case of the hotels, paving, lighting, restaurants, and many other things, the public are willing to pay more, and do pay more, for the better facilities. Not so with the railways; with more trains, heavier trains, faster trains, more luxurious trains, and better track, there has swept over the country a wave of legislation for a 2-cent fare. The 2-cent maximum fare is unjust, and retards the development of the very things the railway-user wants, because it is obvious the railway-owner must sooner or later stop doing so much work without any margin of profit at all.

In England the first-class passenger rate is 4 cents, second-class 2½ cents, and third-class 2 cents. In Germany, the first-class is 3 cents, second-class 2.55 cents, third-class 1.79 cents; but the second- and third-class accommodations in England and Germany are nowhere near as good as those furnished the traveler in the United States.

In Great Britain the average freight charge for handling a ton of freight one hundred miles was $2.31 in 1907 and $2.33 in 1908. In Germany the average charge was $1.42 in 1908; in France, $1.46; Austria, $1.39; Belgium, $1.22. The great freight service of the American railways was furnished in 1908 and in 1909 at an average charge of 75 cents for handling a ton one hundred miles.

In 1888 the average rate per passenger-mile in the United States was 2.35 cents, and in 1908 only 1.937 cents, and yet the accommodations provided have constantly improved in quality. In 1870, the average rate for handling a ton of freight 100 miles was $1.99, and in 1909, 75.4 cents, or a reduction in forty years of 62 per cent.

The railway-owner, by his courage, energy, and intelligence in adopting advanced methods, has been able to improve the railway system of the United States steadily in the last forty years and still maintain and operate his property in spite of this reduction in rates. If the railway-user had paid, for the year which has

just passed, the same average freight rates as in 1870, he would have paid $2,691,473,751.36 more than he did pay; if he had paid the same average rates per passenger-mile as in 1888, the additional payment would have been $147,260,000, the two amounts being greater than the entire earnings of all the United States railways in the last year.

But the railway-owner is now put to it to maintain and operate his property on the basis of present rates, present wages, present prices for material, present taxes, present rigid government restrictions, and the growing demand of a prosperous people for more and better service.

Railways are using rails of 90 and 100 pounds weight to the yard; freight-cars carrying 50 and 60 tons of freight; passenger-cars weighing 50 and 70 tons often carrying only a dozen people, or five tons of dead weight for one passenger, and locomotives weighing 300,000 to 600,000 pounds, with 58,000 pounds on a single axle. The railway-owner can go no further in using larger tools in his plant and

must depend for any further economies upon an improvement in the work of the railway-user and the employee in using that plant. If the railway-user fails to load and unload the cars promptly, if the railway employee is careless and inefficient, the railway cannot be used to its full effect.

The American railways to-day are represented by a capitalization of $13,600,000,000, or a trifle less than $58,000 per mile of road, and less than $40,000 per mile of track. Compare this total capitalization with the total reported for farm values, $20,514,001,838 for 1900, and in manufacturing, $12,686,265,673 for 1905, and it will be seen that the railway is the second great industrial interest in this country. The railways in Europe are capitalized per mile as follows:—

United Kingdom	$275,040
France	139,390
Germany	109,788
Austria	112,879
Russia	80,985
Belgium	169,806

Here is evidence that the American railway-owner has produced a piece of machinery with

far less average capitalization than in any other country; which does more work in moving the commerce of the country per mile of railway than in any other country, and which has steadily reduced the prices charged to the railway-user in spite of increasing costs and complications in doing the business. The American railway-system of to-day could not be reproduced for a figure anywhere near what it stands for on the books. Monthly, daily, almost hourly, improvements have been made, and the railways are becoming seasoned and better adapted to the great work they have to perform. Go to any of the large cities and growing towns and try to acquire sufficient terminal ground to do even a moderate business. Not long ago in New York, an investigation was made with the idea of seeing what it would cost to get an entrance to the city and a moderate terminal area, from the northern boundary down to about Fortieth Street. One of the best real-estate agents in New York made a calculation, and he thought that a right of way down through Manhattan Island

sufficient for two tracks and with a limited terminal at the end might be obtained for $170,000,000, but would probably cost $200,000,000. This would be an investment of $170,000 or $200,000 a mile for the New York terminal alone of a railroad between Chicago and New York, and in addition right of way between the two cities, intermediate terminals, and the railway itself must be obtained. Every man, of his own knowledge, is aware of the fact that property suitable for terminals, in common with other real estate, has advanced very much in value in all cities, big and little, in the United States in the last twenty-five years. The railway-owner is paying taxes on those increased values and is surely as much entitled to a return on the increased value as is the owner of a farm, or the owner of a business block.

Now, who is the owner of this enormous and complicated piece of machinery built up in the last fifty years? The best figures obtainable as to the number of stockholders show 440,000, and while the number of bondholders

cannot be determined with the same accuracy, information about a few roads indicates that the number of bondholders exceeds the number of stockholders, and that 1,000,000 is not an unfair figure to represent those holding railway securities. Many of these holders are women and children, charitable and educational institutions, national banks, savings banks, trust companies, and insurance companies. The average for each owner of railway property in this country is $13,600. Of course, some individuals hold more than this, and very many hold much less, but the statement that railways are owned and controlled by a few very rich men is not correct. These 1,000,000 owners represent at least 4,000,000 people in the United States whose daily bread and butter depends more or less on the success or failure of the railways.

Now, this railway-owner, with an average ownership of $13,600, is dependent entirely, as to a return on his investment and as to the safety of his principal, on the honesty, intelligence, and efficiency of the railway employee,

and on the sense of justice and fair treatment of the railway-user. The railway-owner if he does not like his investment, cannot shut up shop and wait a while until business is better. He cannot even abandon his business and pocket his loss. He must go on, whatever the conditions may be, with the hope that the ultimate good sense and justice of the American people will give him even a part of that protection and encouragement that is given to those who may be engaged in agriculture and in manufacturing.

Then, in 1909 there were 8,831,863 depositors in savings banks, having $3,713,405,710 on deposit. In 1908 there were 25,852,405 separate life-insurance policies held in this country with a face value of $14,518,952,277. Every savings-bank depositor and every holder of a life-insurance policy is interested in having railway securities safe and profitable, because the savings banks and the life-insurance companies are all holders of railway securities, and anything that affects the welfare of those two great institutions affects

millions of people outside of the owners of railway stocks and bonds. In 1909 there was $33,117,068,129 of fire insurance written in the United States and $126,171,492 fire losses paid. The large fire-insurance companies, like the large life-insurance companies, are investors in railway bonds and stocks. The savings banks and insurance companies must have assets that pay a sure return and that can be converted easily and quickly into cash, and their ability to pay depends in part upon the stability and earning power of the great railway corporations.

For the years 1906, 1907, and 1908, complete statistics are furnished by the Commerce Commission. These were three years of fairly good business in the country, when farmers and manufacturers did well. In round numbers, the results to the railways of the country from the transportation of persons and property were: —

	1906	1907	1908
Total earnings	$2,325,765,167	$2,589,105,578	$2,394,780,410
Total expenses and taxes	1,611,662,886	1,828,828,189	1,754,951,949
Net earnings	$714,102,281	$760,277,389	$639,828,461

These are very large sums, but the net earnings, on an average valuation of $13,000,000,000, represent only 5.49 per cent for 1906, 5.85 per cent for 1907, 4.92 per cent for 1908, — not a very large return even if the railway-owner could take it all, but he must, of necessity, use a liberal share of any such net earnings for a multitude of improvements and additions to the railways, for as the Commerce Commission says in its report for 1908, "Every safely administered railroad should recognize the difficulty of bringing operating expenses under control, and in times of prosperity provide against the contingency of reduced traffic."

The railway-owner recognizes this, for there was paid in interest and dividends, in the years named, 1906—$518,893,000, or 3.99 per cent; 1907—$551,129,000, or 4.24 per cent; 1908—$571,114,000, or 4.39 per cent; the balance going back into the property. In fact, in order to keep up a great piece of machinery like the railway, subject to damage in many ways and needing constant additions, an amount at

least equal to 60 per cent of that paid in dividends should be put back out of current earnings into the property each year. How many farmers, merchants, and miners would think these returns attractive enough to justify their engaging in the business?

Out of every one hundred dollars of gross earnings of the railways in 1908 there was paid for —

Labor — direct payment	$43.36
Labor in materials purchased	7.77
Labor in fuel and oil	6.88
Total for labor	$58.01
Fuel and oil, less labor	1.72
Material, less labor	3.33
Hire of equipment and buildings	2.46
Hire of tracks and terminals	4.60
Damages and injuries	1.80
Taxes	3.56
Interest	13.34
Deficits	2.39
Total	$91.21
Betterments to property, etc.	4.37
Dividends	4.42
	$100.00

Out of each one hundred dollars, ninety-one dollars was paid out for labor, material, taxes, rents, interest, all of which must be paid if the railway-owner is to keep out of the hands of the

sheriff. The balance, nine dollars, was available for improving the property and for dividends, and the margin is very small.

There are 1,525,000 railway employees, including the officers, representing at least 6,000,000 of the population of this country. They are equal, in honesty, intelligence, industry, and character to the average of American citizens engaged in other pursuits. They are trying to do their part in managing and operating this great piece of commercial machinery that the railway-owner has created. As they are human, they make mistakes, and sometimes forget that they assume an obligation when they enter the railway service, to be honest, fair, and loyal to the railway-owner, and to the railway-user. The great army of railway employees, in their efforts to obtain the highest wages possible, must remember that there are only one hundred cents in a dollar; that it is possible to force wages to a point beyond the ability of the railway-owner to pay and still maintain his plant for the benefit of the railway-user, and that the constant wage-

increase has already discouraged the railway-owner, and will tend to discourage him more unless additional revenue can be obtained from the railway-user. The railway-user often fails to understand the wage situation, and the railway employee and the railway-user must remember that in fixing wages they must consider the ability of the business to pay the wages demanded.

In 1908, the official figures show that there were 1,458,244 railway employees receiving $1,051,632,225 in wages, or an average of $721.16 per year. For the year 1907 the average pay of railway employees in the United Kingdom was $260; in Germany $371, in Switzerland $292; in Belgium, where the railways are owned by the state, firemen received $15 to $23 a month, the higher rate only after fifteen years' service; enginemen from $22.50 a month to $28 a month after twenty-four years' service; conductors from $15.97 a month to $34.70. The average railway worker in Belgium gets 43 cents a day. Certain classes of American railway employees get more in a

month than Belgium railway employees average in a year.

The advances made in wages in 1906 and 1907 increased the payrolls of the railways about $120,000,000, and increases since then and now under discussion mean $60,000,000 to $75,000,000 additional. These two increases are equal to 7 per cent per year on a capitalization of from $2,500,000,000 to $2,750,000,000, a sum of money that would go a long way in adding to the transportation facilities of the country.

The railway employee has a responsibility to the railway-user to be sober, industrious, and careful, so as to furnish the best and safest transportation to the public, and he has a responsibility to the railway-owner to furnish a full day's honest and efficient work for the compensation that he receives, whatever it may be. The industrial supremacy of America cannot be maintained unless that is done, and every patriotic man, no matter what his employment, should stop waste in labor as well as in material, and expect hard work and rigid economy.

Suppose each one of the railway employees should, by better work and greater care, save only one cent a day; that would mean for the country $5,566,250 a year, or enough to buy between 5000 and 6000 freight-cars; or, enough to build two hundred miles of branch-line railway in Montana. If they could save ten cents a day, it would mean $55,662,550 a year, which could be applied to adding to the railway facilities in the country.

In addition to the 1,525,000 employees working directly for the railways, there are 2,500,000 in coal mines, steel mills, manufacturing plants, all supplying what is necessary for the railways in their operations, who represent at least 10,000,000 of our total population. So the railway employees and the employees of the industries dependent more or less on the maintenance of railways on a sound basis represent approximately 16,000,000 people whose rights must be considered.

The railways are the great purchasers of materials of many kinds, and the moment they are forced to stop buying, the effect begins to

be felt in the forest, the mine, the mill, and the factory.

Of the 90,000,000 people in the United States, there are, as already pointed out, about 4,000,000 interested directly as railway-owners and their dependent families; 6,000,000 as railway employees and their dependent families, leaving 80,000,000 as railway-users, with an indirect interest in the prosperity of the railway. Some of these 80,000,000 are vitally interested, because they work for industries dependent upon the purchasing power of the railway for their success; others because they have their savings in banks and trust companies; others because they hold life-insurance policies for the protection of their families, and fire-insurance policies for the protection of their homes and business; and all are interested in having enough transportation and good and safe transportation.

The railway-user, however, is too apt to think that his interest lies in having railway rates constantly reduced, railway wages constantly raised, and railway taxes constantly in-

creased, forgetting that it is equally important to him, and really more important, to have the railway system of the United States so handled that capital will feel safe in adding to investments necessary to furnish the transportation that the business of the country demands. Already, in certain parts of the country, the margin between adequate and inadequate transportation is too small. Only last winter, between the Missouri River and Chicago, and in the vicinity of Chicago, the railways could not furnish that prompt and regular service that is essential for a satisfactory movement of the commerce of the country.

The railway-user needs safe and adequate transportation, and it will be furnished just so long as the business pays. The railway-owner cannot constantly be borrowing money for every minor improvement and addition to the property. The cry is sometimes raised that the railways should not make improvements out of current earnings. They should not make all of their improvements out of current earnings, but they should put back into the property

every year a substantial amount of their earnings for improvements like better passenger-stations, more side tracks, better rails, better ballast, safety appliances, and other forms of improvement of which the present generation of railway-users get the immediate benefit, as well as making possible a higher development of the country for their children and grandchildren.

The railway-owner, the railway employee, and the railway-user must coöperate, and all must remember the definition of coöperation, — "the association of a number of persons for their common benefit." In the long run it will not benefit the railway-user to crowd down rates so low and raise taxes so high that he takes away all chance of profit from the railway-owner. The railway employee must remember that in the long run he will not profit if he crowds up wages so high that the railway-owner has not sufficient margin for the development of the facilities along progressive and safe lines. On the other hand, the railway-owner must in fixing the rates do so in such a

way that a healthy development of the country will be promoted.

Individually, the railway-owner, the railway employee, and the railway-user, when they discuss the subject, are fair and agree there should be fair treatment to all. There is, however, a school of politicians who make wild and extravagant statements and who are assuming, without knowing the facts and without adequate study of the situation, that great injustices are being done. It is important for the railway employee and the railway-user to post themselves about this general subject if they are to continue to exercise their present control in the management of the business of the railway-owner. His business is now an open book, and every transaction is recorded in plain black and white and reported at frequent intervals to railway commissions, state or national. The charges that he makes for service performed are largely decided by statute or by railway commissions. Many of the rules under which he conducts his business are made by law, or by various boards. The railway-user,

if he wants the best railways and progressive development of them, must see to it that his law-makers and his boards of one kind and another are the right kind of men, and that they look at this question, not in a narrow, partisan way, but in a broad, far-sighted manner.

On January 16, 1905, Senator Elkins introduced into the United States Senate a resolution asking the Interstate Commerce Commission for a statement showing the work done by that body with respect to formal and informal complaints, hearings, decisions of the courts, exorbitant rates and rebates during the preceding eighteen years, or since the creation of the Commission. On May 1, 1905, the Commission furnished figures showing that the total number of complaints which reached the Commission was 9099 and the total number disposed of through the friendly offices of the Commission, 9054, or more than 99 per cent of the total. The cases appealed by the Commission to the courts were only 45 — about one half of 1 per cent of the total number of cases. Of the 45 cases appealed to the courts

by the Commission, only 8, or less than one fifth, were sustained by the courts, all of which involved unjust discriminations (always a difficult question in our complicated commercial life), and not a single case involved an exorbitant rate. Of the total number of complaints made to the Commission, 8319, or 91 per cent, were of so simple and unimportant a character that they were disposed of informally.

During these eighteen years the separate freight transactions of the railways in the United States were in excess of 3,000,000,000, or there was one complaint for each 330,000 separate commercial transactions, and not a single serious complaint about exorbitant rates. Certainly a marvelous record of compliance with a law, and one not equaled anywhere in the history of the statutes regulating human conduct, — a compliance that should refute completely the idea that the railway business needs some peculiar treatment by law that is not required by other business and the idea that the railways do not try to obey the law.

The cost to the country of the Commerce Commission in 1888 was $97,867, and in 1909, $988,936.

In the past, complaint has been made because the railways engaged in politics; to-day the country is confronting a danger which is just as serious, if not more so, because politics is now taking charge of the railways and other forms of business, and assuming the responsibility of many parts of the management, but with no responsibility for the financial results. The railway-owners and the railway officers and employees are just as loyal, high-minded, and energetic and industrious citizens of the United States, as a class, as any other body of men in the country. They have a great task imposed upon them, which they are manfully trying to carry out, and at times it seems as if every man's hand was against them.

Edward Everett Hale, one of the grand old men of the nineteenth century, put into four short sentences some very sound philosophy about life: —

OWNER, EMPLOYEE AND USER

"Look up, and not down;
Look out, and not in;
Look forward, and not back;
Lend a hand."

Will not greater progress be made in trying to put this great railway business on a sound basis, if all who are interested "look up" at the best features of it and of the men engaged in it, and do not assume, without knowing, that the business is conducted improperly and that the men giving their lives to the work are incompetent or dishonest? Will not the best results come if all "look out" from their own surroundings and see the difficulties confronting others as well as themselves, instead of thinking only of their selfish, local advancement? Will not the best results be obtained if all "look forward" with hope to the future, instead of repining over the mistakes that may have been made honestly in the past in the effort to put the United States on a sound industrial basis? Better than all, will not the best results be obtained if every one "lends a hand," and helps instead of raising all sorts of

objections, — many of which are not justified when the facts are known, — magnifying the errors, and minimizing the good work done?

The future welfare of the railway system of the United States is largely in the hands of the railway-user, and what will he do? Will he crowd the railway-owner so hard that the latter cannot produce the increasing amount of transportation needed for the free flow of the commercial life-blood of the nation? Then what? The railway-user will have several courses open to him. He can have a less rigid system of regulation and government red tape and encourage the railway business and the railway-owner to go on as does other business, subject to the great laws of supply and demand, competition, and the natural desire of the owner to manage his business in such a way that it will be a success, with the hope of profit, which is the main incentive of all business. Or, he can take over the ownership and management of the railways and become responsible for their operation and for the money needed for additions and betterments

to existing properties, and for the building of new ones. In the present state of politics in this country, such a plan is almost terrifying in its possibilities, because the Government has not shown that it can do work of this character as efficiently and economically as private individuals can. Government ownership, management, and development of the railways would become a matter for the politicians to trade upon. Just recently, in Austria, there has been considerable discussion because the railways were taken over by the state on the theory that better service and lower rates would be given to the public. Now there is agitation to put them back into private hands, for, instead of proving profitable, there is a heavy annual deficit, which the general taxpayer has to make up. The service has deteriorated and railway-expansion has ceased. Or he can continue the present system of rigid governmental control and supervision, and interference with the judgment and management of the owner, which is rapidly having a deadening and discouraging effect on the

development of the business, and is preventing those additions and improvements so much needed in a growing country like the United States. Or he can continue the present system of government regulation and control, but guarantee to the railway-owner some minimum return upon his investment, so he will be willing to put money into the business. Such a plan, however, means that the non-user of the railway will be taxed for the benefit of the user.

To my mind the first course, of more commercial freedom, is by far the better for a growing and expanding country like the United States. We have not yet reached the state of perfection, politically or socially, where government ownership and bureaucratic management of the large, complicated, and delicately adjusted railway system of the country will be a success. Putting a government uniform on a railway employee does not at once endow him with a new kind of intelligence and supernatural powers, and it will reduce his feeling of responsibility.

If the railway-user and the railway employee are not careful to see that justice is done to the railway-owner, and if he is not protected and encouraged a little, the time is rapidly coming when the railway-user will go to buy some transportation for his wheat, his coal, his cattle, his manufactured articles, and he will be confronted with the statement from the railway-owner that all the transportation he has has been sold, and furthermore, that he cannot produce any more transportation because he cannot get any more money, and if the railway-user desires an increased quantity or quality of transportation he must organize and produce it for himself. The railway employee will find that the monthly pay-day is not so regular and certain as it used to be, and that the wages paid are lower.

The ultimate good sense of the American people and their belief in the rights of property will, in the long run, I believe, prevail over the misstatements and misrepresentations of some public men who, without careful study and full knowledge of the situation, and without

due regard to the effect of their extravagant language, make indiscriminate attacks upon the railway system of the United States, and upon the men who are giving the best that is in them to the work of advancing that system.

II

THE INDIVIDUAL, THE CORPORATION, AND THE GOVERNMENT[1]

THE welfare of the people of this country, of the manufacturers, and of all business, including the railroad business, is interdependent, and in the long run there must be proper relations between them and the Government and fair and reasonable treatment of and by each to permit that progress in this country which its marvelous resources and intelligent population justify.

Railroading is a business, and is conducted under much the same conditions as the manufacturing business and has many of the same problems and difficulties. There are three important differences, however, between the manufacturing business and the railroad business. The first is that manufacturers can

[1] Address delivered before the National Association of Manufacturers, New York, May 17, 1911.

close their establishments, reduce their expenses to the necessary caretakers and lose the interest on their investment until such time as their inclinations or the demands for their particular articles make it worth while to operate their plants. The railroad, however, cannot stop; once started, it must go on unless the owners choose to abandon it absolutely, and lose not only all chance of interest on their money, but the entire principal as well. The second is that most manufacturers can warehouse their product, hold for rising prices, and sell at some future time. The railroad cannot do this. It must have ample transportation ready at any given time and place, and if it is not used then and there it is lost, not only to the railroad, but to the consumer. The manufacturer of transportation must always be ready to furnish the maximum amount of transportation for the use of the American people. In other words, he must be ready for the "peak load" at any time. This "readiness to serve" means a great investment and a great expense which is given far too little con-

sideration by those who now make the numerous laws, rates, rules, and regulations affecting the railroads. There should be enough margin of profit in the business so that at all times and places there will be this "readiness to serve." The third difference is that manufacturers have some control over their prices. In times of a great demand for any article they can and do increase their unit prices, and in poor times they are at liberty to reduce them to encourage trade, with no fear that later on they will be forbidden by the Government to advance them. They can meet competition and take on extra business without cutting their entire scale of prices. In the railroad business an excessive demand not only brings no increase in the unit price, but legislatures and commissions, which have practically taken charge of the management of the railroads (except the responsibility of their finances), more and more take the view that an increasing demand justifies lower prices, thus reversing the old-fashioned law of supply and demand.

The so-called railroad question has been

magnified and much distorted by politicians and doctrinaires. The people have been led to believe that the railroad business is very different from other forms of business and that it can be successfully conducted under many severe legislative handicaps and according to rigid mathematical formulas. That it has sustained itself to the present time is due to the great growth of the country and to the patient, able, and courageous work of men who have devoted their lives to the business. It has achieved moderate success, not because of legislative interference and tinkering, but in spite of them.

What is business? Professor James Mark Baldwin, in his volume "The Individual and Society," says that "business has to do with the *production* and *distribution* of valuable things; money, utensils, anything for which there is a demand in society, or on which society or some individuals of it set value"; and again, "to *produce* such things in response to the demand and to *distribute* them to those from whom the demand comes, is the under-

taking of business." Here is set forth very clearly the idea that the *distribution* of things is business just as much as is the *production* of them. One of our troubles in this country is the result of the fact that we have wandered away from the common-sense view that railroading is business. Naturally there always has been, and always will be, a difference of opinion between the buyers and the sellers as to quality and price of articles traded in, and only when there are reasonable and fair men in business and reasonable and fair rules governing business will men continue in business.

There are four great primary forms of business: agriculture, transportation, manufacturing, and mining. As these grow, prosper, and interweave, conditions are created that produce the many other forms of business that have been so successful in this country, — merchandising, banking, insurance, etc., — all essential to progress, but none of which can prosper unless the four great primary occupations prosper, and this they cannot do unless

they are fairly treated by the Government and the people.

The United States *is* a big nation, and I use the word "is" purposely because the growth of the country and the development of business has been so great that more and more must we think and act "continentally." We can no longer conduct our affairs on the basis that the United States "are" a big nation. This very fact of size is important in its bearing on the industrial, railroad, and economic questions of the day. Being a big nation, we need big tools to do our work. We must have big railroads; we must have big banks; we must have big lumber operations; we must have big insurance companies; we must have big manufacturing establishments. In working out the problem of providing food, shelter, clothing, heat, light, and transportation for the American people we have developed great systems of railroads, great industrial corporations, great financial institutions. They are necessary and should not be condemned simply because of their bigness. Yet some critics of

the American railroad and business situation are using the words "system" and "big business" as if they were in and of themselves a crime against society and inimical to the forward march of the country to a higher and better order of things.

To bring out some points it will be necessary to burden you with some figures showing the growth of the country. The continental area of the United States has increased from 820,377 square miles in 1800 to 2,974,159 in 1910. In 1800, 305,708 square miles had at least two persons to the mile and in 1900, 1,925,590 square miles had that number or more per square mile. In 1800 the population of the country was 5,308,483, of which only 4 per cent lived in places having 8000 or more people, while in 1910 the population was 91,972,266, and probably 40 per cent lived in places of 8000 or over. In 1910 in 228 cities of 25,000 population or over there were 28,508,007 of people or 31 per cent of our population. In 1840, 77.5 per cent of the people at work were employed in agriculture, and in 1900, 35.7 per

more income than they did for the year ending June 30, 1907, on nearly 20,000 less miles of railroad. On a per-mile basis, the comparison is even more striking. The net operating income per mile of road after paying taxes was:—

For the year ending June 30, 1907.....	$3,342
For the year ending June 30, 1910.....	3,508
For the year ending June 30, 1911.....	3,188
For the year ending June 30, 1912.....	3,094

and in the mean time the owners have put millions upon millions into improvements on existing roads, in addition to creating nearly 20,000 miles of new road. It is well, therefore, to bear in mind that in the railway business large increases in amount of property and in gross earnings do not necessarily mean increases in net earnings.

But the public may say that seven hundred and sixty millions of dollars is a staggering sum for the owners of railway property to receive, and that they are well paid. In the report of the Railway Securities Commission appointed by Mr. Taft, which made a most exhaustive examination of the whole subject of railway

capitalization and the returns thereon, occurs the following paragraph: —

"Neither the rate of return actually received on the par value of American railroad bonds and stocks to-day, nor the security which can be offered for additional railroad investments in the future will make it easy to raise the needed amount of capital. The ratio of interest and dividends to outstanding bonds and stocks of American railroads is not quite 4½ per cent. In each case the average ratio of dividends to the capital of national banks is between 10 and 11 per cent. There is a widespread belief based on imperfect examination of the evidence that the amount of capital needed for the future development of our railroad system is small in proportion to that which has been required in the past; that the profits on such added investments of capital are reasonably well insured, and that we can therefore fix attention predominantly if not exclusively on the needs of the shipper without interfering with the necessary supply of new money from the investors."

In answer to this the public may say that the low return of 4½ per cent is applied to a capitalization that is unfair. Valuations of railway property have been made in a number of States by public authorities, with the result that in the States of Washington, South Dakota, Michigan, Minnesota, and Wisconsin the figures for the value of the railway property were $1,211,806,522 as compared with the aggregate gross capitalization of $1,210,999,033. In Minnesota the State made a valuation of the property of the Northern Pacific, Great Northern, and Minneapolis & St. Louis roads of $193,094,302, while the capitalization for the three roads in Minnesota was $155,051,909. Here are a few cases where governmental authority has made a valuation of the railroads, and in every case the value is more than the capitalization. Taking the country as a whole, there is no doubt but that the railroad properties to-day as going concerns are worth more than the par value of the capital standing in the hands of the public.

In all business transactions there are at

least two parties, and if business is to succeed, there must be coöperation, fairness, and justice from each to the other. In the current talk of the day there are the Government and the railways, the people and the railways, the employees and the railways, and the shippers and the railways. And the railways, in a way, are under fire from the four great forces, the Government, the people, the employees, and the shippers.

Without attempting a long discussion over old contentions, or looking back to what the people ought to have done or what the railways ought not to have done in the past, I want to call your attention to some things in which the people, who need and use the railways, for whose service the railways are created, and who regulate the railways, can, with fairness and justice to themselves, be of assistance in conserving railway service for the common good.

The most important service performed by the railways is the transportation of freight. Not everybody has to travel, but everybody

must have food, clothing, shelter, and fuel, and nearly all of the food, clothing, shelter, and fuel of the people of this country is carried all or part of the way from producer to consumer in freight-cars. The use that the railways make of their cars is, therefore, of the utmost importance, not only to the railways but to the people. When a freight-car is standing still, it is doing no good to the railway or to the people, but the railways have had to pay for that car, and a part of their capital is invested in it. When it is standing still, it is not earning anything on that capital, and as the capital of the railways is a part of the national wealth, the usefulness of the national wealth is impaired by the loss incurred through the idleness of the car. When a freight-car is waiting to be loaded by a shipper, or when it is waiting to be unloaded by a consignee, that car is not in the service of the people, whose demand for transportation is now in excess of the capacity of the railways to supply.

It would be a very happy condition if the

railways always had enough cars, so that they could supply every shipper with an empty car whenever he wanted it and just as soon as he wanted it. They have not enough cars to meet this requirement at times of the heaviest business in the country, and it is not their fault that they have not. In fact, it would be an economic waste, taking the country as a whole, to have enough cars for the very highest amount of business; this would mean that many cars would be idle for several months of the year. There would be too much idle capital in such a plan.

On December 31, 1911, there were 2,160,408 freight-cars in the United States. At $800 a car this means a capital investment of $1,728,326,400. If this large amount of capital is not used steadily and economically, there is direct loss to the business of the country. But remember that the very livelihood of a railway company depends upon its obtaining the utmost possible service from its freight-cars, and there is no phase of operation to which a railway-manager gives more attention than to the

most effective distribution and prompt handling of equipment. Every now and then there is complaint of a coal famine, and that there are not cars enough to move the coal-supply. In reply to such complaints, the railways say, with some justice, that if users of coal defer their orders until cold weather, they cannot reasonably expect the railways to move in a few weeks the coal which should have been shipped during a period of months and stored in yards or bins at various points of consumption. Crowding the shipments into a short period of time creates car-shortage and a congestion on tracks and in yards.

No less than shippers in the prompt loading of cars, can those who receive freight conserve railway service, and therefore the national wealth, by promptly unloading shipments received in carloads, and by promptly removing their freight from the station sheds when it comes in less than carloads. Carelessness about this is one of the evils at which the railways in former times connived under stress of competition. There was a time when a con-

signee was allowed to hold a car as long as he liked. The retail dealer who received a car of coal used it as a warehouse until little by little the contents were sold. A factory receiving carloads of coal, cement, lime, lumber, or any other article, kept the cars on its sidings until the contents were needed. And so it has been with dealers in hay and grain and fruit and vegetables. That is, freight-cars were held and used as warehouses, thus preventing the use of the same car for its proper purposes. Such practice is most wasteful, and demurrage charges have been established in the hope that cars would be released more promptly. In the United States, as a rule, consignees are now allowed forty-eight hours in which to unload cars before any demurrage charge begins. In Germany, in times of increased business, consignees are obliged by a strictly enforced law to unload their cars within six hours. Notwithstanding this allowance of free time, which is more liberal in the United States than in any other country, commercial customs have grown up so that cars are retained at

large terminals, and even at country stations, beyond the expiration of this time, being used as storage warehouses. This practice is expensive to the railways, because the demurrage payment does not begin to pay for the idleness of the car; and it is expensive for the shipping public, because it reduces the carrying capacity of the railways as a whole.

The owners of freight, therefore, have a responsibility for creating suitable facilities for loading and unloading freight promptly and for warehousing it in structures of their own, rather than in railway-cars, because the railway-car is the most expensive warehouse that can be used. A box- or a coal-car costs from $700 to $1000, and a refrigerator-car costs from $1200 to $1500. When one of these cars is placed upon a team-track in Minneapolis, for example, so that hay or grain or coal or fruit or meat can be unloaded, a piece of land sufficiently large for the car and team must be occupied, or at least 900 square feet. This land is generally in a part of the city where real estate is valuable and is worth from

$1 to $5 a square foot. For the sake of example, say it is worth $2 a square foot, making the ground worth $1800. Here, then, is an investment for car and land of from $2500 to $3300. There are from 2500 to 3000 cubic feet of storage in a car, so that this storage space represents a capital investment of from $1 to $1.33 a cubic foot. A good warehouse several stories high could be built, using the same land area over and over again, for very much less per cubic foot, so that present commercial customs of permitting freight to be warehoused in cars are resulting in a serious economic waste to the country as a whole as well as to the railroads. Prompt loading and unloading of freight-cars is one way in which owners of freight can conserve railway service and in the long run help themselves.

The conservation of railway service has yet larger aspects. The moving of a freight-car from the place of shipment to its destination is the duty of the railway company, but it cannot perform that duty without adequate facilities. These facilities cannot be obtained unless the

people of the country allow the railways such earnings as will enable them, not only to pay their expenses, but to attract the capital needed for the provision of such facilities, and for their extension to meet the demands of our growing country.

For the prompt movement of business, not only cars are necessary, but locomotives, sufficient trackage to move trains without delay, and terminal yards through which cars may be handled promptly, made up into trains, and dispatched. It has not been many years since there were more railway-tracks, more cars, and more locomotives than were needed, but now the situation has changed. In this rapidly developing country five years makes a difference, and ten years makes a very large difference.

Mr. William M. Acworth is a noted English authority on railway economics. About a year ago he said: "You American railroad officials ought to stop talking about double-tracking your roads as if that were the end of the improvement. The time will come when you

will have not only double tracks, but you will have four, six, eight, ten, twelve tracks. We are at that stage in England to-day, and yet the railroad problem in England is nothing compared with the United States. Here your distances are so great, you have so far to move your traffic to get it to water, that it will become so dense that you will wonder why you talked about double tracks at all."

Those of us who believe in the great growth of the United States realize that Mr. Acworth has not overdrawn the picture, and we realize how tremendous the problem is to get the money with which to do all the things that should be done in the way of giving safe and adequate transportation facilities.

Mr. Samuel W. Fairchild, Chairman of the Committee on Internal Trade and Improvements of the New York Chamber of Commerce, recently presented a very luminous report about the railroad situation. He says:—

"It is estimated that it will require in the next five years, to maintain railroad facilities equal to the enormous traffic of the country,

the immense sum of $8,500,000,000. Some idea of the magnitude of this sum may be had from the fact that it is eight times the national debt, it is more than two and a half times the amount of money in circulation, it is equal to all the deposits in the national and state banks, and nearly equal to the entire money value of all the farm products of the country in one year. It is over three times the annual gross revenue of the railroads, and it amounts to nearly one half of the existing railway capital represented by stocks and bonds. The question of obtaining the $8,500,000,000 necessary to make railroad facilities equal to the expanding traffic of the country during the next five years, therefore, constitutes the most important problem now confronting business men."

I have already quoted from the report of the Railway Securities Commission, showing the low rate of return on railway investments. That same Commission says: "A reasonable return is one which, under honest accounting and responsible management, will attract the

amount of investors' money needed for the development of our railroad facilities. If rates are going to be reduced whenever dividends exceed current rates of interest, investors will seek other fields where the hazard is less or the opportunity greater." And again: "The necessary development of railroad facilities is now endangered by the reluctance of investors to purchase new issues of railroad securities in the amounts required. This reluctance is likely to continue until the American public understands the essential community of interest between shipper and investor and the folly of attempting to protect the one by taking away the rewards of good management from the other." Mr. Fairchild, also, whom I have previously quoted, points out that the time has arrived when there should be some support of the railroads.

That the railways have been falling behind the business of the country is shown by statistics from the reports of the Bureau of Census and of the Interstate Commerce Commission. In the United States the value of the railways

increased only about half as fast as the value of all property during the fifteen years from 1890 to 1904. In 1910 the capital value of agricultural property throughout the United States was 100.5 per cent greater than in 1900; the capital value of manufacturing property 105.3 per cent greater; but the cost of road and equipment of the railways was but 40.2 per cent greater. By capital value is meant book value, and not capitalization. For the ten years ending in 1910 there was an increase of 81.2 per cent in the gross value of manufactured products, with an increase of 105.3 per cent in manufacturing capital. During the same time there was an increase of 85 per cent in the total operating revenues of the railways, accompanied by an increase of only 40.2 per cent in the cost of road and equipment. This indicates that the railways are exhausting that margin of elasticity which they ought always to preserve in order to meet the demands of growing business like that of the present. It is to the interest of the people as a whole that the railways be kept at all times in a condition of

"readiness to serve" and with an ability to carry the "peak load" without breakdown.

The percentage of net return on the capital value of the manufacturing industry was over twice as great in 1910 as the percentage of the net return on the cost of road and equipment of the railways. This disparity between the growth in capital value of agriculture and the capital value of the railways is greatest in that portion of the West where great extension of the railways and an increase in their facilities is necessary to keep them equal to the rapidly developing business. In 1910 in Colorado the value of farm lands and buildings was 284.1 per cent greater than in 1900; in Idaho, 479.1 per cent greater; in Montana, 305.7 per cent greater; in North Dakota, 313.9 per cent greater; in Oregon, 244.3 per cent greater; in South Dakota, 356.6 per cent greater; in Washington, 394.7 per cent greater; in Wyoming, 263.1 per cent greater. Yet in this time the gross capitalization of the railways in this western section increased no more than from 53 per cent in that district which includes the

Dakotas to 87 per cent in that district which includes Wyoming and Montana.

The saying that you cannot "eat your cake and have it too" is true of the railroads and the people to-day. We cannot have the good service and facilities that we need, give employees the increasing wages they demand, pay the higher taxes imposed, keep rates down, and even reduce them farther; we cannot do all these things and still find investors who will furnish money for increased facilities.

The conservation of railway service is a great national question; the owners and managers of the railways are doing all they can, but the people must help. So while so much is being said and done about conservation of soil, of forest, of agriculture, of the boy and girl, and of human life, a little thought and attention should be given to the urgent necessity for the conservation of railway service. It must be protected and kept "from loss, decay, or injury." Without proper conservation of this great service which supplements all the others, development will be checked.

It is idle to blame the present owners and managers of the properties for errors of the past; the present and the future are the important points to consider.

The old nursery rhyme reads:—

"Old Mother Hubbard,
Went to the cupboard,
To get her poor dog a bone,
But when she got there,
The cupboard was bare,
And so the poor dog got none."

Uncle Sam should study his transportation machine and understand it better, and take steps to conserve it. If he does not he may find that in an effort to have cheap transportation he has not enough transportation, that his "cupboard is bare," and that it will take him a very long time and a vast amount of money to get it well equipped again.

IV

RATE-MAKING AND THE GOVERNMENT[1]

I THINK all railroad-owners and officers agreed with President Roosevelt when he said in a message to Congress: "Above all else we must strive to keep the highways of commerce open to all on equal terms; and to do this it is necessary to put a complete stop to rebates. Whether the shipper or the railroad is to blame, makes no difference; the rebate must be stopped, the abuses of the private car, and private terminal track, and side-track systems must be stopped." In fact, the great bulk of the freight in the United States is now moving under that principle. I believe that there is much exaggeration and misconception about the alleged abuses that exist. There is no question of "railroads versus the people"; there is a demand for the correction of certain abuses

[1] Remarks before the Committee on Interstate Commerce, United States Senate, May 20, 1905.

and failures in the management of railroad business, resulting, unfortunately, in much confusion of ideas, which may produce results very detrimental to the growth of business in this country, and therefore harmful to the railroads. On the Northern Pacific road, for example, — comprising about six thousand miles, — there are no rebates; there are no private-car abuses; there are no side-track abuses. There are, of course, differences of opinion about the relations of rates, as there always will be under any system. Railroad business, being conducted by human beings who are no more infallible than those in other walks of life, is not conducted with absolute perfection. For the errors made in the conduct of the enormous railroad business of this country, the plan of control and management should not be condemned and dislocated, any more than the general scheme of our government should be condemned because there are frauds in the administration of the Land Office and the Post Office Department, and inefficiencies in the administration of the government in places.

It is my sincere belief that a very, very large proportion of the transactions made daily between the railroad-owner and the railroad-user go on without friction, without difficulty, and without hardship or injustice to any one. Not long ago I caused a calculation to be made of the total number of individual freight transactions on the Northern Pacific road in a year. In round figures there were something over 3,000,000 separate freight transactions, or about 9600 a working day. Each one of these transactions involved the use of freight tariffs, the making of bills of lading and waybills, the loading and transporting of the freight, the safe delivery to the consignee, the collection of the money, and the issuing of receipts. During the same time there were claims against the railroad for loss and damage, and other errors and failures connected with this large number of complicated transactions, of about one per cent of the shipments. Considering the complexity of the business and the large number of employees involved, this record, I believe, is creditable and shows reasonable

stability and efficiency in conducting the business. What is true on the Northern Pacific is doubtless true on other roads, and most of the transactions between the shipper and the railroad are completed without any feeling of injustice, or that there is something radically wrong with the American railway system. The same thing is true to an even greater extent in the passenger business. Passengers get on and off trains all over the country without feeling that they have any complaint against the railroads as to discrimination or injustice in rates, except in rare instances.

With the growing railroad business of the United States, the distribution of railroad securities, and the demand for manufactured articles used by railroads, it is not unfair to say that, counting railroad employees and owners, and employees in industries furnishing material and supplies to railroads, there are from 2,500,000 to 3,000,000 persons whose daily bread and butter and general position in life, together with those of their families, depend very largely upon the railroad busi-

ness and its development along wholesome lines. Multiply this number by four and we have 10,000,000 to 12,000,000 persons, or from one eighth to one seventh of the population of the United States, who either fail to realize the importance of the policy under discussion, or who, if they do realize it, are generally silent through lack of opportunity or ability to make any statement in their own behalf.

Most of these people are attending quietly to their duties on the railroad, in the factory, or in their homes, and they form a very important part of the population of this country. Ultimately, any step under which the Federal Government exercises the power of fixing the actual rate to be charged by railroads will affect them adversely by introducing an economic force into their scheme of life which will mean repression and curtailment of the chance of success due to hard individual effort. In the clamor for fixing railroad rates, much of which comes from those who want some personal advantage, either political or commercial, from those who hope to obtain

through governmental aid success which they have not obtained by their own energy and ability, and from those who believe in socialism, the rights of this large number of people should not be lost sight of, and they should not have imposed upon them governmental conditions that do not obtain in other forms of commercial and business life in this country. When this large class of people come to understand fully what is contemplated, their voice will be heard most plainly against the socialistic plan now proposed.

The newspapers comment more or less upon the fact that great fortunes have been made out of the railroad business, and name a small number of individuals who, through superior ability, energy, foresight, and hard work, have built up large fortunes. From the constant discussion of this subject by the daily press, there is a more or less prevalent opinion that the railroad business furnishes a field for the rapid accumulation of money, and, to a certain extent, that this money comes unjustly from the public. It is true that a few large

fortunes have been made in the railroad business, but no more than in the iron, coal, lumber, and manufacturing businesses, if as much. They are the capital prizes in the lottery of life that are open to every ambitious American. But of the great army of railroad-owners, officers, and employees, a very small proportion obtain more than enough for their daily living, whatever their position in society may be, and some saving for old age and their children outside of that.

As a rule, the railroad officer or employee is as conscientious, high-minded, and devoted to the interest that employs him as any man in any other walk of life, and he appreciates that the best interests of his employer are served by building up the tributary country, which can be done only by adjusting rates and giving service that will develop the natural resources. He is also fair-minded and anxious to be fair and square with the user of the railroad, as well as with the company, because he realizes that the greatest success to the company comes from fair treatment to the patron; in

other words, a daily application of the "square deal."

Take them as a class, moreover, the income received by the railroad officer and employee is no greater than that received by those interested or engaged in other business pursuits in the United States requiring the same ability and experience; and in the case of the railroad-owner, it is less.

We hear the expressions "railroad problem" and "railroad question" very often. There is nothing mysterious or unusual about the railroad business, and the problems and questions surrounding it are the same as those affecting other commercial business. In considering the railroad business, however, the fact should not be lost sight of that the business of building, managing, and operating railroads is comparatively new. Only within the last thirty years has it assumed the great importance and proportions that it now has. The work done by the American investor, railroad-builder, owner, and manager in the last thirty years has been enormous in producing the present

railroad system of the country, — a system which, on the whole, is one of the most wonderful things ever produced by human energy. The performing of all this work has required many men, much money, making of great mistakes, wasting of money before obtaining the present roads, learning by experience, training of men to administer the business, evolution of methods; and the wonder is, not that there are some abuses and failures in the conduct of the business, but that there are not more.

The railroads of the United States are today in an unfinished condition, and need to attract capital, administrative talent, and the wage-earner. The country wants, in the railroads, the same things that are being furnished in older and smaller countries like England, France, and Germany; that is to say, better road, track, and bridges, faster trains, greater safety, more beautiful station facilities, all of which means an enormous investment of capital and a considerable period of time, the training of many men, and the least interference possible with the development of the

business. Hamper the railroads by too much restrictive legislation and take away from the man who has to provide the money for these expanded facilities the naming of the price to be charged for the use of these facilities, and this expansion will gradually be stopped. "You can lead a horse to water, but you cannot make him drink." You can give to a branch of the Federal Government the power to fix an actual rate which the owner of property shall receive for the use of his property, but you cannot make the owner of the property improve his railroad, buy more cars, build more branch railroads, and expand his business.

That the abuses connected with the railroad business, small in number as I believe them to be when compared with the total volume of trade, are not affecting materially the general growth of business in the United States is evidenced by the fact that everywhere you go in this country, from the Atlantic to the Pacific, you see thriving towns and cities, expanding agricultural productions, demand for lands, growing values of lands, increasing

manufacturing capacity, increasing ownership of homes, well employed labor, demand for more and better transportation, and a chance for the conscientious, sober, and industrious man to improve his standing, no matter what business he may enter.

If railroad rates, as a whole, were unjust, unreasonable, wrongly discriminatory, as between individuals and localities, this condition would not exist. It has been held that the power to fix a railroad rate should be lodged with some other authority than with the railroad-owner, because railroad transportation enters into the life of the people in every way, and, therefore, the railroad-owner should not fix that price. Is it not also true that the price of producing power enters into the life of the people in every way? The price of a pair of shoes, of a coat, or of any manufactured article, depends in part upon the cost of the power used to run the machinery that made the articles in question. If the final decision to fix the actual rate to be charged by the railroad is to be given to some branch of the Federal

Government because a railroad rate enters into every one's life, it is only a short step to say that the final decision as to the price of coal, or water-power, or of any other agency producing power should be fixed by some governmental authority. Again, the price of labor enters into the cost of living of every one, and to a greater extent than the price of railroad transportation or the price of power, because the price of labor is the largest single item of expense to the railroad and to the coal-mine. If it is wise for the Federal Government to fix the price of railroad transportation because of its affecting every one in the nation, why is it not equally wise to fix the price of coal, of electricity, and of labor? And where are you going to stop?

One argument advanced for changing the present federal laws about rates is that there has been during the last few years a gradual elimination of competition, and there is a fear that rates will be so controlled that they will not fall gradually, or that they will be advanced arbitrarily.

That there has been some elimination of certain kinds of competition is no doubt true. It has resulted, however, very largely from the better experience and sense of the railroad-owner or manager, who, each year, is conducting his business on a more scientific basis, so as to produce the greatest amount of good transportation at the lowest possible figure, and who has eliminated considerable waste and foolish competition, thus permitting a great decrease in rates during the last twenty years. There has been, however, no elimination of competition as to markets, which is the real competition in a country so large as the United States. The wool-grower in Montana must sell wool in competition with the wool-growers of Arizona and Kentucky, as well as of Ohio and Australia, and the railroads, in order to help develop Montana, Arizona, Kentucky, and Ohio, are all striving to place the wool of their respective states at the point of consumption, at the lowest price possible. The Northern Pacific does not fix the rates on wool from Montana. The price of wool in Boston, affected

by the number of sheep on the Australian farms and the amount of free tonnage controlled in Liverpool, are elements beyond the control of the American railroads and the American Government. The Northern Pacific cannot charge an infinitesimal fraction of a cent more than will enable the Montana man to place wool in the common market at a common price, grade for grade. The makers of woodenware in Menasha, Wisconsin, and in Tacoma, Washington, are competing to reach the same markets, and the railroads leading from those two places, through self-interest, are adjusting the rates as low as they can, in order to help develop the trade in their respective territories. The producers of lumber in Idaho, Montana, and Washington, and the producers in Minnesota, Arkansas, and Louisiana are all trying to sell in the markets of this country and abroad, and the railroads from the respective districts, if the business is to move at all, must meet competitive prices and adjust rates accordingly.

Examples without number could be given

of this competition of markets in raw material, in all sorts of manufactured articles, and in products of the mine and farm. In fact, this competition as to markets has been so marked in the case of live-stock that rates have been brought down to such a point that the railroad-owner is hesitating about increasing his investment in cars for the purpose of transporting live-stock, because the margin of possible profit in the business is so small.

Another potent cause that tends to prevent an advance, and to continue a general fall in rates, is that the railroads, in order to succeed at all, must do the largest volume of business possible over their rails, as the cost decreases somewhat as the volume increases; so the officers of the railroads are continually endeavoring to increase the volume of their trade, and stand ready to reduce charges whenever it is clear that a development of country and an increase in tonnage will result.

There is an erroneous idea that rates are fixed arbitrarily, and that a few so-called "railroad magnates" fix and control all of the

rates in the United States; and that their chief idea is to fix them high. Nothing can be further from the truth. A railroad rate is the result of a large number of commercial and geographical forces and conditions working one upon the other, consultation between shipper and railroads, consultation between officers of one railroad and another, a study of all the conditions surrounding the problem, — of the density or volume of business, of grades, engines, car-supply, and cost, — and this process is going on every day among thousands of railroad officers and shippers.

Another element that is effective in the direction of causing a gradual reduction in rates, if the railroads are left reasonably free, is the fact that railroad transportation cannot be stored up and saved for future use. The railroad-owner and manager never can strike an exact balance between the demand for transportation and the supply. He has, therefore, on his hands at all times some unused transportation, — empty cars standing on sidetracks, engines waiting in round-houses, a

large demand for them at one time of the year and a decreased demand at another, a demand to handle business east but nothing west. He therefore goes to work to increase trade by seeking to adjust rates so that he can use up part of his idle transportation by moving products between points where there was no such movement before. It is claimed that if the Commission have power to fix rates, such power would only be exercised occasionally, and that the power to fix a given rate upon complaint does not carry with it the power to fix rates generally. This is not true. Rates in this country are so complicated, are so related to one another, different cities and sections are so competitive, that a change in one rate will force changes in many other rates.

Rates really fix, or adjust, themselves, just as prices in all business transactions fix and adjust themselves. The man who slaughters cattle, hogs, and sheep cannot arbitrarily fix the price to be charged for the different parts or products of the various animals, so much a pound for tenderloin steak, so much a pail for

lard, so much for hoofs, so much for spareribs, nor can any one else. His prices are fixed for him by competitive conditions, and unless he receives, on the whole, for all of the different kinds of things obtained from the animals enough to pay the total cost of his business, and some profit, he ultimately abandons his business. The railroad business is very much more complicated than the business of the butcher, and there are an almost infinite number of prices in the business which are fixed and adjusted just as the prices for the butcher are fixed.

If one man, if the Government itself, owned all the railroads of the United States, the rates could not be fixed mathematically at a central headquarters, and permit any development of business.

Regulating is one thing, and *fixing* is another. The present law grants ample power to regulate, to say what is unfair and unjust, and if it were enforced fairly and if the powers now in the hands of the Commission were used, much of the alleged popular demand for giving

the powers to *fix* the actual rate would disappear. It is a question whether we are not even going too far in the direction of regulating for the best expansion of trade. Our neighbor Canada encourages its railroads so much that to-day products of the United States factories are reaching the Pacific Coast via Canada in constantly increasing quantities, because the Canadian roads can and do make rates which the American roads cannot make without being charged with violation of the Interstate Commerce Law.

The rule that the inland proportion of the rate necessary to move products between the United States and foreign countries be published, is a restriction that hampers the American roads in the efforts to expand trade and increase foreign commerce. What good does it do any one in the United States to have carloads of manufactured articles delivered at Seattle, for instance, by way of the Canadian Pacific, when the United States labor, United States coal, and United States railroads could haul the product all the way? What harm does

it do any one in the United States if locomotives are moved from Schenectady, New York, to China via United States railroads and Puget Sound rather than via New York and the Suez Canal, even if the rate from Schenectady to Puget Sound on the locomotives destined to China is less than on those used at Puget Sound, and even if the rate fluctuates day by day or week by week, to meet competition of the Suez Canal or the German maker of locomotives?

What, then, are the complaints? Those charged with the duty of studying and administering the great railroad business of the country receive complaints of various kinds. West of the Mississippi and Missouri Rivers they may be classified as follows, in the order of their relative importance: —

1. *Complaint of insufficient facilities.* This, in the growing, progressive, and expanding states of the West, is a steady and constant complaint, and it requires much time, money, and energy for the railroad-owners and officers to keep the supply of transportation up to the

demand. The complaints come in for more freight-cars, for more passenger-trains, for better passenger-stations, for more side-tracks, for more switch-engines, for under-crossings and over-crossings in growing cities, for branch lines into new and undeveloped sections of the country; and every railroad west of the Mississippi must spend every year sums equivalent to from five to twenty per cent of its gross earnings for providing what is needed on the road already in existence, — not counting sums of money that must be raised for building branch lines and new lines. Would bureaucratic rate-fixing stop this complaint, or would it make it worse?

2. *Complaints of the relation of rates between communities.* The fact that communities are growing and strive each to outstrip the other in the West produces most energetic demands by mercantile organizations, commercial clubs, and other agencies that this town or that town have the rates so adjusted that it can enlarge its sphere of operation and diminish the territory of its rival community. Much of this

complaint is caused by the competition of water-routes and Canadian roads that are not subject to the Interstate Commerce Law. The officers of the freight departments of the great railroads spend as much time, if not more, on this subject as on any other, making a constant study of the relation of rates and endeavoring, through consultation with all interests and without fear or favor, to harmonize the conflicting demands of the various communities. A commission could not satisfy this class of complaints, and would be driven to a system of rates based on distance.

3. *Complaint of relative rates between individuals.* Many individuals continue to ask the railroads for a better rate on their particular business than may be used by their competitor, although this request for personal preference in freight rates is diminishing steadily. Let it be understood that the federal authority will enforce the existing law, against both shipper and railroad, and this complaint will stop.

4. *Complaints that the power of deciding questions is being centralized too much.* The rail-

roads, in their effort to conduct their business without personal and unjust discrimination, have centered the power of deciding various questions in their main offices, — with the result that sometimes there is considerable delay in deciding questions. A man wants a side-track to his warehouse, and in order to decide that question properly considerable information must be obtained and some one has to render a decision whether the company shall spend the one thousand dollars needed to furnish the track. Another man will build a manufacturing plant if he can get rates that will enable him to reach his market in competition with some other point. In order to decide this intelligently, an investigation must be made of prices, cost of doing business, the relation of other factories producing the same article, and all of the other factors that enter into the making of the price of his product at the point of consumption. This takes the time, thought, and study of a great many men on the railroad and causes some delay. Give a commission power to fix rates and you would

not help this difficulty but would increase it.

5. *Complaints that the rates charged by the railroads are in themselves too high.* This complaint is not very common, because as a whole rates are very low, and in most cases the man who pays the freight is satisfied with the rate in itself, provided he feels sure that no one else is doing better than he is.

There are, and always will be, abuses in the conduct of railroad business as in the conduct of other business. That the abuses of which there is now complaint will be corrected by taking a given number of American citizens and making them officers of the Government, and charging them with some of the same duties that are now performed by the same class of people as private citizens, is very doubtful.

The rebate is one abuse, but that is practically gone as to the freight business. There remains personal discrimination in the passenger business by means of the pass or free ticket.

Discriminations between localities exist and must always exist in a country as large as the United States, and with as many vary-

ing conditions. Such discriminations are not caused by the railroads but are the result of geography and competition. The present law, if enforced, is ample to prevent any "*unjust*" discrimination.

High rates do not exist as a rule, and all evidence and the general conditions point to the fact that there is no real ground for apprehension that rates will be materially higher than they are now if the natural play of commercial forces and geographical and market competition is allowed to go on without artificial interference. In fact, if railroad-owners are not hampered and restricted too much, and are encouraged to perfect the means of transportation and the expansion of business, the rates in this country will probably continue to fall gradually, so that they will be below the present very low average of three fourths of a cent. On the other hand, discourage the railroad-owner, and give the Federal Government the power to fix the actual rate, and the tendency will be to an average higher rate.

If the Federal Government is to fix the actual rate, it must always fix it high enough to pay to the owner of the property cost, depreciation, and interest. If the Government does not so fix each rate, then it must provide means in some way to reimburse the owner of the road for any loss. To-day in handling an expanding business, the railroad-owner takes the risks of business and handles some at cost or less, and if he loses he must blame himself and pocket the loss. The Government could not force rates upon him that are non-compensatory, and the result would be that under a system where the Government fixed the actual rates, there would be a checking of the movement towards lower rates by the voluntary action of the roads in meeting commercial conditions.

There are some abuses connected with the private car, but the private car has served a most useful purpose during the last ten or fifteen years in helping to care for the commerce of the country. The money and energy of the railroad-builder in the last forty years

have been very fully occupied in trying to produce the railroad, and he has not, in every case, kept pace with the demand for special facilities. The owner of the private car stepped in and said, "I will provide cars for fruit and perishable produce," and the fact that he did so helped to develop the orange business, the butter, egg, and dairy business, the fruit business, and the meat business. The owner of the car naturally has tried to get as high rates as possible on his investment, and in some cases there have been unreasonable charges. In the evolution of the railroad business, however, now that some other parts of the railroad are more nearly completed, the tendency is for the railroads to eliminate the private car and provide their own special equipment, and this alleged evil, if left alone, will correct itself in time, because a railroad, like every other business, must make use of all by-products, and cut out all waste, and will therefore buy and own all cars needed for its business.

Railroads have naturally been unwilling to spend the money, in every case, for private

tracks for an industry the success of which was uncertain. As a result, those promoting a given industry have put in their own side-tracks, furnishing their own switch-engines within their works, and delivered their own business to the railways. Incident to this there have been some cases of excessive payments to the owners of private side-tracks and private switch-engines, but here again the evolution of the business and the better experience and judgment of the railroad officers are eliminating any such payments.

What are the remedies for these abuses? In my humble judgment these various abuses will correct themselves through the good sense of the American business man and through the friction of business. In addition, the Interstate Commerce Law, with its amendments, provides ample machinery for correcting absolutely every discrimination as between individuals. If that law is effectually enforced, it will drive out the few remaining cases of personal discrimination as to freight shipments.

I think the effect on railroad-management,

on the government machinery, and on the public generally would be good if the principles of the Interstate Commerce Law were applied strictly to the passenger business as well as to the freight business. That is to say, I would stop the making of preferential arrangements for transportation of passengers free or at reduced rates, because they occupy positions of more or less power, responsibility, and trust. As is well known, it is customary for the officers of the Government — municipal, county, state, and federal — to ask for and to receive more or less transportation, and some also for their family and friends. The revenue involved in this practice is relatively insignificant, because the great bulk of this travel would not take place if a free pass or reduced-rate ticket was not given. The effect, however, on the mind of the public is bad, and indirectly the impression is created that the railroad-owner, through the free pass, has a great deal more influence than he really has, that there is much more interference by the railroad in the machinery of the Govern-

ment than there really is, and that there is a much greater obligation on the part of the recipient of the pass than there really is. Most passes are given to the officers of the various governments as a compliment, and not with the idea that any direct benefit is to be received, — possibly with the hope, in some cases, that any unfair action within the power of the receiver of the pass will be postponed or prevented. In the long run, however, the railroad-owner, the government officer, and the public generally would be in a better relation each to the other if this discrimination as to passenger transportation were eliminated. Such a step would go far toward making the general public feel that the railroad was not interfering improperly with politics, and that it did not have something within its power to give away to law-makers and others in authority that other people did not have. Let the officers of the Government, from the highest to the lowest, set the example of *obeying the law*, by paying for their railroad travel the same rates charged the general public.

The Interstate Commerce Law also has the power to prevent unjust discrimination between localities. Let the Commission be active in using the power it now has of stating when there is unjust discrimination; their decision and the force of public opinion, the pressure of business men, the increasing good sense of the railroad-owners and officers, will all be elements in determining a new relation between the communities.

As to private cars and private side-tracks, I believe that any difficulties or abuses incident to their use will eliminate themselves, just as the foolish custom of paying ticket commissions eliminated itself by the voluntary action of the railroads. If, however, there is a feeling that the Government must in some way try to hasten the inevitable result, the present law seems ample to cure the evils, provided the Federal Government will use its machinery for enforcing it. If more law is needed, a very simple one will correct the alleged evil. Let it be the law that no payment shall be made by a railroad or by an individual for the use

of, or service furnished by, a private car or private side-track, that is any greater than the payment made contemporaneously for the same kind of car and for the same kind of service by the railroads each to the other. Then, if the railroads are exchanging cars between themselves at twenty cents a day, or at fifty cents a day, that is all the private car-owner will get; if railroads furnish ice at $2.50 per car, that is all the private car-owners will receive; if the railroads switch in Chicago for from two to five dollars per car, that is all the owner of the private side-track will get in that locality.

The attempt by the Federal Government to fix in detail the exact rates to be charged by the railroads would be unfortunate for the United States. Such policy is un-American, in that it subjects a large number of the citizens of the United States to an economic restriction that does not apply to those engaged and interested in other classes of commercial, industrial, and agricultural business. By having the Government fix the price of

railroad transportation, an obstacle would be placed in the way of the highest success of individual effort that would gradually result in depressing and repressing the efforts of those interested in or engaged in the railroad business and would reduce all to the dead level of mediocrity.

Such a plan is unjust, because it would apply to the large number of American people interested and engaged in the railroad business a rule not applicable to others. In good faith they have invested their time, their training, their energy, and their money with the idea that there were rewards for success as in all other businesses. They are taking, and have taken, great risks, as do all who are engaged in business, to obtain the benefits of success, if that comes, just as they must submit to the result of failure, if that comes.

Such a plan is unnecessary, because the development of the railroad business in this country has been such that we have the most effective service as a whole, the lowest rates as a whole, the highest wages as a whole, and

the most progressive management of the business as a whole, of any country in the world. And all of this has been developed in fifty years by the energy, ability, and ingenuity of the American business man. With this record in the past, why is it necessary to take even a chance of delaying or changing this marvelous development? Or, to quote President Roosevelt again: "Nothing could be more foolish than the enactment of legislation which would unnecessarily interfere with the development and operation of these commercial agencies."

Such a plan is unwise, because it would tend to a centralization of power in the making of the rates for the country. As I stated earlier, one of the complaints made now is that the decisions are not made promptly enough. What will be the inevitable effect upon the rate-making machinery of the railroads, if every rate can be challenged, and the power of fixing it is placed with a commission? The natural effect will be that the shipper will not be satisfied with the rate made by the railroad, and the railroad will hesitate to make a new

decision, knowing that it is likely to be appealed from. The commission will be in time deluged with complaints. In trying to settle the questions submitted to it, the commission would have to adopt one of two courses. It might try to do exactly what the railroad-owners are doing, — adjust rates upon business principles, taking into consideration every element that affects the movement of commodities, weighing every situation, discussing the claims of communities and shippers, and finally rendering a decision which, when made, must be the rate until the same process is gone through with again. No matter how wise or able one set of commissioners may be, it would be physically impossible for them, sitting in Washington, to dispose promptly of the cases submitted to them. Then the suggestion would be for additional commissions, and in time the Federal Government would have as many people engaged in the rate-investigation, rate-discussion, and rate-adjusting business as the railroads now have. In other words, they would become the

business managers of the railroads, but they would have no responsibility for results, no responsibility of ownership, no interest in providing large sums of money necessary to keep the railroads equal to the business, no responsibility or incentive for increasing business and developing new territory.

If the commission did not adjust the rates on business principles, — and it could not, — it would have to adopt some simple basis to be applied to every one without regard to geographical conditions or to previous commercial development. It is manifestly impossible for the Government to fix the rates on the postage-stamp principle, because that system creates unjust discrimination to the greatest extent conceivable. To-day mail is transported from San Francisco to New York at as low a price as it is from Washington to Philadelphia. Either the price from Washington to Philadelphia is too high, or the price from San Francisco to New York is too low, and this principle could not be applied to the fixing of freight rates unless the Government is pre-

pared to make good any deficiency in revenue from the taxpayers as a whole.

The course that the commission would be driven into, and that every state commission is gradually being driven into, is to adopt a mileage basis of rates. The effect of such a basis on a country of the size of the United States, with its past history of commercial development, is appalling to one interested in the growth of the country. If, in the beginning of the railroad and business development of this country, rates had been fixed arbitrarily on the basis of mileage, the States west of the Mississippi River would still be thinly populated, with few railroads and with little business of any kind. Inland cities, without access to water transportation, would not have been built up and the whole growth of the railroad and commercial system of this country would have been different. Fortunately for the growth of this country, the railroad-owners and operators did not adopt a rigid mileage basis of rates, and as a result the country has grown, agriculture has grown, diversified

manufacture has grown, and there has been an equalization of commercial situations that has permitted a development of cities and communities, which under the mileage basis would all have been congested in a very few places. Give the commission the power to fix rates, and the land values of the agricultural States west of the Mississippi River would be at once affected. An advance of value would be stopped, and a decrease in value would result. To-day the railroads, in their desire to develop territory, make the rates on wheat from North Dakota, on wool from Montana, on lumber from Washington, on butter from Iowa, so as to compete with similar products raised in Ohio, in Kentucky, in Mississippi, in Pennsylvania, in New England. If the Government has to fix the rate, what right will it have to refuse to the wool-grower of Kentucky, the wheat-grower of Ohio, the lumber-producer of Mississippi, the butter man of Pennsylvania, the same rate per mile that is charged the producer in North Dakota, Iowa, Montana, and Washington? No matter

how low the rate is made for the first ten miles, or for one mile of railroad transportation, when the haul is one thousand or two thousand miles and the mileage basis is used, the rate will be so high that the business will not move.

On a mileage basis of rates the business of the commercial centers west of the Mississippi would be destroyed. Cities on the oceans and the Great Lakes would have advantages, but the inland cities and agricultural districts would be depressed. When the agricultural and manufacturing population in the great States between the Alleghanies and the Rocky Mountains realize — as they will sooner or later — what a set of rates based on distance will mean to them and to their children, there will be a *real* rate agitation compared with which the present stimulated demand will be as nothing.

Far better the difficulties existing under the present system of commercial freedom than to turn to a rigid governmental plan for fixing railroad rates.

V

THE RELATION BETWEEN THE FARMER AND THE RAILROAD[1]

AGRICULTURE was so highly regarded among the people of antiquity that the Hindus ascribed it to the great god Brahma, the Egyptians believed it to have been given to man by Isis, the Greeks credited it to Demeter, and the Romans to Ceres, and the farmer Cincinnatus was called from the plow to, and twice served in, the highest offices of the state. In the United States it is the greatest business, in the number of people engaged in it, in the money value of the product, and in its importance to the welfare of all the people.

The development of agriculture in the United States began with the settlement of the colonies, and, until the Civil War, was rapidly extended. In the ten years ending in

[1] Address delivered before the Tri-State Grain and Stock Growers' Association, at Fargo, N. D., Jan. 17, 1912.

1800, the area brought within the limits of settlement was 65,000 square miles. Between 1810 and 1820, the American people, then numbering 8,250,000, increased the density of population in every section of their settled territory, increased their manufacturing capital two-fold in spite of a three years' war, and occupied 101,000 additional square miles. The Civil War checked the westward flow of people, and retarded development, but did not stop it, and since 1870 the development that characterized earlier days has proceeded without interruption.

The growth of farming in this country shows two distinct phases, one lasting until 1860, and the other starting about that time and not yet complete. Prior to the Civil War, agriculture was treated more as an occupation, or means of subsistence. Fertile soil was practically free to all. There was little outside pressure to make a farmer careful to preserve the productiveness of the soil, and the agricultural products were generally greater than the demand, partly because transportation

was limited and high-priced, compared with to-day. A movement which began about the time of the war, coincident with the growing demand for technical education, has somewhat changed the nature of farming in this country, and has made it an important business rather than an occupation. Population has grown rapidly, and the demands of the people for food have become great. More and more the attention of intelligent men, in the farming ranks and without, has been directed toward the future and the question of providing the necessities of life to a population fast approaching the one-hundred-million mark.

A rapidly growing country needed men skilled in the sciences and arts of life to deal with its new conditions, and while purely commercial activities were the first to feel this need, farming also began to feel it, and the movement which introduced technical education and in a degree supplanted the old classical schools with those designed to develop the kind of men the country needed gave to

the business of farming the first schools for the scientific teaching of agriculture. It was the West, and not the older and wealthier East, that gave the United States its first agricultural school. The second constitution of Michigan, then close to the western frontier, provided in 1850 for the founding of an institution to teach agriculture, and the movement, spreading eastward, resulted in the incorporation of what is now Pennsylvania's State College of Agriculture in 1854, and the incorporation of Maryland's agricultural college and the founding of a school of agriculture in Massachusetts, both in 1856. The work thus started reached Congress, and resulted, in 1857, in the introduction of a "land-grant" aid bill, proposed by Hon. Justin S. Morrill, and passed in 1862. The Department of Agriculture was created, first as a bureau, in the same year.

Up to 1905, the progress of agricultural education under this encouragement was such that 66 institutions had been organized, with an endowment fund amounting to $12,045,629.

In May of 1910 there were 975 institutions giving instruction in agriculture. There has been a rapid development at the same time of college-extension work in agriculture, agricultural education under the county system, and consolidated rural schools, together with numerous other activities, which have been of practical value in creating better standards of knowledge and practice of farming.

One who studies the history of the world's farming cannot fail to be struck with the fact that the dignity and importance of the farmer's calling have always been recognized, although more in some countries than in others, not alone by the passing of laws for his encouragement, but by the coöperation and help of those in other occupations. In the reign of Henry VII of England, in the year 1488, a statute was passed to prevent the acquisition of large land-holdings, in order to prevent lands formerly tilled from becoming idle and unproductive. Half a century later the English law shows a quaint statute, curiously like some of the legislation one hears about

now, which was passed because the growing of sheep had become so profitable that many had engaged therein. It says: "Some have 24,000 sheep, some 20,000, some 10,000, some 6,000, some 4,000, and some more and some less." And yet it alleged the price of wool had nearly doubled, "sheep being come to a few persons' hands." A penalty was therefore imposed on all who kept above 2000 sheep, and no person was to take in farm more than two tenements of husbandry. This attempt at "trust-busting" apparently did not work, for in 1597 it was necessary to enact a new statute that arable land made into sheep-pasture be returned to tillage, and no more arable land be devoted to pasture.

Literature of agriculture, prepared for the help of the farmer, dates back in England to the thirteenth century, and Thomas Tusser created so much interest in 1562 with a volume called "Five Hundred Points of Husbandry" that one hundred and twenty-five years afterward Lord Molesworth recommended that it be taught in the schools. The

live-stock business was well understood and carefully studied even then. The preface to a volume of Sir Anthony Fitzherbert, published in 1523, is curiously similar to the publications the excellent agricultural colleges are now sending to the farmer, for it says: "An housbande cannot well thryve by his corne, without he have other cattell, nor by his cattell without corne. An because that shepe, in myne opinion, is the most profitablest cattell that any man can have, therefore I purpose to speake fyrst of shepe." This is sound advice to-day, except that the great "American Hog" is not mentioned, and he is really more important to the modern American farmer than sheep.

Some phases of the present agricultural situation in the United States give reason to hope that the movement to make farming more than ever a business, conducted along scientific business lines, will develop great headway during the next decade. In the twenty years ending in 1910 the population of the United States increased about one third,

— from 62,947,000 to 91,972,000. Immigration during the ten years ending in 1910 was 8,795,386, or more than double that of the preceding ten years. The total of unappropriated and unreserved lands in the United States has fallen since 1890 from 55.32 per cent of the total area, to 40.98 per cent, and the 59 per cent appropriated or reserved represents the best selections.

In the three States of North and South Dakota and Minnesota, there were, in 1900, 47,654,452 acres of unappropriated and unreserved lands, and in 1910 but 7,536,333 acres. With the reduction in the available government land, farms have become more valuable, and less easily obtained by those of small means. The average value per farm of all farm property has increased from $3,649 in North Dakota in 1900 to $13,109 in 1910. In South Dakota, the average value in 1900 was $2,901, and in 1910 it was $15,018. In Minnesota the average value in 1900 was $3,549, increasing in 1910 to $9,456. It is interesting to compare here the average value of the holdings of the

owners of the securities representing the Northern Pacific road, $423,000,000, owned by nearly 25,000 people, $16,290 to the individual owner, — not very much more than the value of the average farm in North and South Dakota. (A recent governmental valuation fixed the value of the road at $488,000,000, or $65,000,000 more than the capital outstanding.) The value of North Dakota's farms and buildings in 1910 was $822,035,000, an increase of 314 per cent in ten years. In South Dakota the total was $1,005,080,807, an increase of 356 per cent in a decade. In Minnesota farm land and buildings were worth $1,259,510,000, an increase in the same period of 88 per cent. These figures show how rapidly farm values have advanced as a result of energetic farm development and improvement, coupled with cheap rail transportation, permitting distribution of farm products to many markets. In 1909 the wheat crop of these three states alone had a value of $216,647,000. The wealth-production of the farms of the United States has increased from $5,017,000,000 in 1900 to

$8,926,000,000 in 1910, and has nearly doubled since 1897.

The movement of settlers to the West has reduced the areas of government land and increased the acreage on farms from 536,081,000 in 1880 to 873,729,000 in 1911. The occupation of the rich and unoccupied prairie lands has greatly stimulated the development of irrigation in the West, the acres irrigated having grown from 3,361,000 in 1889 to 11,000,000 in 1907, because a decreasing land-supply has made it both necessary and desirable for the people to find ways of utilizing areas formerly unproductive.

Corn retained for domestic consumption has increased from 1,865,000,000 bushels in 1900 to 2,734,000,000 in 1910, while the 1900 exports of 213,123,000 bushels fell in 1910 to 38,128,000 bushels. In 1900, 361,207,084 bushels of wheat were retained for domestic consumption, while in 1910 there were retained 649,824,682 bushels, and the exports of 186,096,762 bushels in 1900 had fallen to 87,364,318 bushels. This drop in exports tells

clearly the story that our own people are drawing more heavily each year on our farms for their food-supply.

Secretary Wilson of the Department of Agriculture takes the view expressed recently by President Taft, that farm production will keep pace with the country's necessities, yet it is very apparent, from the shrinking areas of land available and not in farms and from the rising prices of farm-lands due to greater demand for them with the increase of population, that the people of the United States are beginning to catch up with the immense annual farm production, and that in the future, with less raw and very productive land coming in, there must be increasing production, or the people will not be as well fed or as cheaply fed as they have been.

In 1800 only 4 per cent of the people lived in cities of 8000 or more, while in 1910 the proportion was about 40 per cent. In 1840, 77.5 per cent of all at work were engaged in agriculture, and in 1900 but 35.7 per cent. Should the next decade demonstrate that the

continual drift of people is away from agriculture, thus bringing about a greater demand than the present farm methods can meet, the responsibility upon the farmer will be heavy, for the welfare of the people will rest more than ever before upon him, and upon his efficient work on the farm will depend very largely the solution of the quality and price of living enjoyed by the man in the city.

If the population grows at its present rate, we shall have in the United States by 1950 two hundred million people, and the demand for the farm products required for their subsistence will have doubled. Competent authorities estimate that to meet this demand it will be necessary to increase the product of each acre of land one per cent a year, or one tenth for each succeeding ten years. The land-heritage of the people of the continental United States is about 1,900,000,000 acres, of which 1,000,000,000 acres or a little less is now considered untillable. The United States Department of Agriculture estimates the total arable land of the country at 950,000,000 acres, of

which 873,729,000 acres have already been taken up and are in farms. There remain 76,271,000 acres of arable area not in farms, and while it must be conceded that, of the area classed as untillable, future scientists will find means of utilizing some portion, it will probably be no great part. What remains to be utilized for farm purposes, plus that which may later be brought under cultivation, is small, compared with the probable population in 1950 and the proportion of the arable area now occupied by farms.

It is fortunate for the future of North Dakota and the adjoining States of South Dakota and Minnesota that their areas of unoccupied land, and consequent opportunities for the settler, are so large. Of North Dakota's total land-area, 45.5 per cent is in farms. Of South Dakota's area, the land in farms amounts to 32.2 per cent, and in Minnesota but 38 per cent of the land-area is in farms. The best authorities in North Dakota estimate that there still remain about 10,000,000 acres that can be profitably put into plow land, and

that future years will see some growth in this amount. In Minnesota and South Dakota similar possibilities exist, yet neither the farmer nor the business man should forget that the present rate of farm-development is rapid, and that the time when these States will come to the limit of their present unused arable-land resources is within sight.

The number of farms in North Dakota has increased two and two thirds times in twenty years. For the ten years ending in 1910 the increase of population was about 81 per cent, but the increase in acreage of farm land was about 83 per cent. The number of farms increased 64 per cent, and the increase in land-values alone added $557,028,000 to the wealth of the farmers. In South Dakota the percentage of increase in the number of farms was greater than the percentage of increase in population, and was ten times as large as the average increase for the ten years ending in 1900. Minnesota showed less increase during the decade, but added 1478 new farms. The effect of this demand for land is shown in the

large addition to the wealth of the farmers from the rising value of North Dakota land. For the three States this total amounts to the surprising sum of $1,730,228,000, or at the rate of $14,418,566 a month for the entire ten years.

Railroad-building began in North Dakota in 1871, when the Northern Pacific reached Fargo. In 1872 it extended its main line west. In only forty years there has been a great change. The people from 1860 to 1875 suffered many discomforts, whether they were farmers or railroad men, compared with the comforts and even luxuries that are common to-day all over the State, as a result of the working together of the two great forces of agriculture and transportation.

The present conditions of life are gratifying, and younger men should remember the hard work of the last forty years in overcoming obstacles, and realize the responsibility for the future laid upon them. The people of this country will demand an increase of acre production amounting to 10 per cent a decade during the coming fifty years.

To the extent that the people of the country as a whole appreciate their growing needs, there will grow up a public sentiment and demand for better farming. There is a personal responsibility upon every farmer to meet the demand of consumption. The average wheat-yield, which for a year like 1909 in these three States was 14.8 bushels an acre, must be raised ten years from now not merely one bushel an acre a year, which would add to the income from this crop from $10,000,000 to $15,000,000, depending on the price of wheat, but a bushel and a half, to make an average of 16.2 bushels. Within twenty years the average will have to be raised to 17.8 bushels.

If only ten men farm well, and their fellow-farmers in a county farm poorly, these averages cannot be met. It is the consistent result, rather than the occasional exploit of a brilliant man, that counts. In these three States there are men who are making good profits out of farming, producing yields far better than the average, and not only maintaining, but in some cases increasing, the fertility of their fields.

They are demonstrating what has been proved in Germany and England, where some of the cultivated land has been cropped for ten centuries, that constant cultivation, if it is wise cultivation, does not exhaust the soil. In those countries, and on this old land, the crop-yield is much heavier than in this country. The soil of Europe has no peculiar characteristics to account for this better production; on the contrary, there is every reason to believe that the same methods of cultivation, which resulted there, as they will here, from the pressure of larger demands for the products of the farm, will produce the same yields in these states.

There is great force in public opinion. The demand for a "safe and sane" Fourth of July in the United States reduced the deaths resulting from the celebration of the national holiday from 215 in 1908 to 57 in 1911, and greatly limited the sale of dangerous fire-crackers and explosives. Public opinion killed the practice of rebating on the railroads of the United States, for people generally came to the view that it was wrong, although it had existed

for many years, and there were laws against it which were ignored by shipper and railroad man both until public opinion brought about their enforcement.

In the Western Territories of the United States the possession of a horse was so essential to life that horse-stealing at one time was regarded as a crime of such degree that one taken in the act was put to death by hanging from a limb of a tree. Justice was thus summarily meted out to the offender who willfully deprived his neighbor of his property. Yet to-day a careless farmer allows weeds to grow in his fields without concern, and the seeds are carried by the wind, and a whole neighborhood may be seeded. The injury to his neighbor is just as definite and tangible as though he had deliberately gone into his neighbor's fields and gathered and carried away the crops. "An eye for an eye, a tooth for a tooth," was the ancient law. This would require damage for damage. In a case which was carried up to the highest tribunal in Missouri, where a property-owner allowed weeds to grow unrestrained in a

vacant lot, it was decided that an ordinance compelling cutting of noxious weeds was valid, that no injustice was done the individual in requiring him to cut the weeds, that it was in the interest of the public health, and that the municipality had the authority to compel the owner of the offending property to cut the weeds and abate a public nuisance. What palliation can be offered for the man who, through carelessness and indifference to the welfare of the community, allows weeds of the most vicious character to grow unrestrained on his land and allows the seeds to be carried throughout the neighborhood? Is this less a crime than depriving a man of his just property by theft? Yet we often see fields in which weeds are allowed to grow and mature their seed, where a few hours' work would save great loss. Whole valleys, thousands of acres in extent, have been polluted with foul seeds by the careless indifference of one man who neglected to destroy a small patch of weeds that grew in his field.

Carelessness of regard for one's neighbor is

as wrong to-day as it was a thousand years before the time of Christ. Then it was decreed: "If an ox gore a man or woman, that they die, [and] if the ox were wont to push with his horn in time past, and it hath been testified to his owner, and he hath not kept him in, but that he hath killed a man or a woman; the ox shall be stoned, and his owner also shall be put to death." (Ex. xxi, 28, 29.) If a man was careless of the safety of his neighbor, if after he had been duly warned that his ox was "wont to push with his horn," he still allowed him to run at large, then the most severe penalty known to law, that of death, was meted out.

Public sentiment in some states goes even further, and there are state boards charged with the stamping out of stock diseases, which are given power to enter upon a farm and destroy animals, if it is necessary for the protection of the sound stock of other farmers. In the Pacific Northwest there are state laws and state inspectors for the purpose of stamping out orchard pests, and the inspectors have a

right to cut and burn diseased trees. The growth of a strong public opinion against poor orcharding is marked by the formation of voluntary associations of fruit-growers, with their own inspectors, having the same powers.

Sound public opinion should be encouraged, and the sentiment of farmers, as a body, should be such that poor farming will be stamped as a moral crime, a crime against one's fellows, for shiftless farm methods injure the property and offset the labor of the adjacent farmer who is trying to produce the best results; and a crime against the people as a whole, for they have charged the farmer with production of their food and expect him to meet the responsibilities they have imposed. It is noticeable that an excellently managed, well maintained, and highly productive farm in a community creates a spirit of emulation, and tends to elevate the standards of farming on adjacent properties. With a knowledge of how to farm better, local public opinion tends in the direction of condemnation of the careless and indifferent farmer.

The average wheat-yield of 1909 is a fair standard by which to judge the average production of these three states. The average wheat-production per acre for the United Kingdom during the ten years ending in 1899 was 33.1 bushels. These states, with comparatively new and very rich land, are therefore raising but 44.7 per cent of the crop that is being produced on the very old lands of Great Britain. Germany's average for the ten years ending in 1899 was 28.9 bushels, almost twice as much as Minnesota and North and South Dakota raised, and more than twice as much as the general wheat average in the United States. In 1900 the tri-state wheat acreage was 15,600,000 acres. At the average farm value of December 1st, the value of the wheat-crop was $216,647,000. If this new and rich land had produced as high an average yield as that of the United Kingdom, the harvest would have been increased by 273,966,000 bushels, and $255,500,691 additional would have found its way into the farmers' pockets. In other words, the farmers would have con-

siderably more than doubled their returns from a single crop. Divided among the 308,141 farms in these three states in 1910, this increased harvest would have brought each farmer an additional $829.13, or a premium of $829 in one year for doing as thorough and productive farming as is done in the United Kingdom.

The business in which the farmer is engaged is the most important in the United States. The business of second importance is that of transportation, which I represent. The two are very closely related, and the success of agriculture means the success of the railroad, for it hauls what the farmer produces and consumes. The farmer is equally dependent upon the railroad, for without transportation he could not market his product, and his success depends upon the regularity and adequacy of the transportation available to him and the fairness of the rates. The close interrelation of these two businesses is less appreciated than it should be. The farmer should not be led into the error of believing that the railroad is trying

to charge more than a fair and reasonable rate, for the success of each business in its own field depends upon the fair and square treatment it receives from the other, and the degree of fairness shown toward it by the people.

When one sees the ordinary operation of the railroad going on without much interruption, except from heavy weather, one does not always realize the great work that has been done in creating the railroad machine in the United States, and the really vast amount of expense and work to keep it going day by day. It seems very simple to see the passenger-trains run in and out of the station, to order the freight-car and send the grain to market, to telegraph to the nearest large town for supplies and in twenty-four or forty-eight hours have them delivered. But it is not so easy and simple as it seems, and there is danger to-day that the next great uplift in business in the United States will find the railroads, as a whole, sorely taxed to furnish the transportation needed for the commerce of the country. Why? Because a misdirected public opinion is demanding

rates too low, taxes too high, wages too high, service too elaborate, and there are not cents enough in the dollar to meet all these obligations and still permit the business to be attractive enough so the man with the dollar will invest it.

Our American railroads have done good work, and can do better, and it is to the farmer's own selfish interest to see that they are so treated that they will be ready at all times to handle his business. To be ready requires constant expenditure.

American railroads are capitalized at.....	$ 60,000 per mile
British railroads are capitalized at.....	275,000 per mile
French railroads are capitalized at.....	141,000 per mile
German railroads are capitalized at.....	112,000 per mile
Austrian railroads are capitalized at.....	115,000 per mile
Average pay of American railway employees is.	$668 per year
Average pay of British railway employees is...	251 per year
Average pay of French railway employees is...	260 per year
Average pay of German railway employees is..	382 per year
Average pay of Austrian railway employees is..	260 per year
Average charge for hauling a ton of freight 100 miles	
United States.....	$0.75
England.....	2.80
France.....	2.20
Germany.....	1.64
Austria.....	2.30

In the United States the railroads haul each year 2500 tons of freight one mile for every

person in the country, in France only 400 tons, and in Prussia only 700 tons.

These few figures show you that the American roads perform a greater freight service than the European roads, at a much lower average charge, pay the employees much higher wages, and have much less capital upon which a return should be made. Even with this relatively low capitalization, the Securities Commission, whose report has just gone to Congress, shows that the return is less than four and one half per cent, a return not very satisfying to an energetic man, no matter what his business may be.

In North Dakota the rates on all grain are about one fifth lower than they were ten years ago. On twelve-bushel wheat from 1000 acres, shipped from Bismarck to the Twin Cities or Duluth, the saving in freight to the farmer is $1 a ton, or more than enough in one year to buy the farmer two of the best eight-foot grain-binders with a couple of hay-rakes thrown in. In the country as a whole, the average freight-rate has gone down about one

fourth since 1888, very largely through the voluntary action of the railroads themselves. On the freight tonnage shipped over the railroads in 1910, this meant the very large saving of $615,928,000.

A bushel of wheat sold for about $.62 in Minneapolis in 1896. That $.62 at that time paid for transporting a barrel of flour 161 miles back into Minnesota. A bushel of wheat sold for about $1 in Minneapolis in 1911, and that $1 paid for transporting a barrel of flour from Minneapolis out into North Dakota 436 miles. In other words, the farmer's bushel of wheat in 1911 would buy nearly two and three quarters times as much flour-transportation as in 1896, although the wages paid by the railroad and the cost of most materials used by it are very much higher now than in 1896.

The present freight rate is very small. How small it is can be better understood when one realizes that for 25 cents, what it costs, according to the United States Department of Agriculture, for the farmer to move a one-ton load by wagon one mile, the Northern Pacific Rail-

way, at its average rate last year, will move the one-ton load 27.2 miles. For the cost of a two-cent postage-stamp it will move a ton about two and a quarter miles. For the cost of ten pounds of ten-penny nails it will move a ton 44 miles; for the price of a No. 2 Ames shovel, 166 miles; for the money it takes to buy a good milk-pail, 138 miles; and for the price of an ordinary lantern-globe, 16 miles.

In prosperous times the railroad returns very promptly to the community a large proportion of all the money it collects, in paying for labor and material. About 30,000 men are employed on the Northern Pacific, at an annual payroll expense for the fiscal year ending June 30, 1911, of about $23,000,000. Materials costing almost $15,500,000 were purchased during the same year. Transactions are large, and it takes a great many passengers and a great many tons of freight to pay the bills. For example, coal burned by the Northern Pacific during the year ending June 30, 1911, cost $6,858,764, and would have kept warm, during the same period, 800,000 persons, — more

than the population of North Dakota. During the calendar year of 1911, the Northern Pacific Railway bought 65,398,665 feet of timber. That was sufficient to lay a plank road eight feet wide and two inches thick in a straight line for a distance of 774 miles; in 1910, before the great fall in earnings, necessitating the most rigid economy, the lumber purchased would have been enough to build a similar road from St. Paul to Boston, 1108 miles. In one year the Northern Pacific used 29,470 gallons of paint on freight equipment, cars, and stations. That amount would be sufficient to paint 627 dwelling-houses of average size with two coats. To repaint a building 24 by 55 feet (equivalent to an average nine-room house) requires 47 gallons of paint.

Here are some figures about smaller things: 105,000 lead-pencils are used in a year. That number would have supplied 5250 school-children two pencils per month during a school term of ten months. 4464 penholders are issued in a year. 249,552 pen-points are issued in a year. That number would have

supplied 4991 school-children five pen-points per month during a school term of ten months. 1125 gallons of ink are furnished in one year. That amount would have supplied 5800 school-children with ten two-and-one-half-ounce bottles of ink for a school term of ten months. The total charge for "stationery and printing" for the fiscal year ending June 30, 1911, amounted to $259,968.76, and the officers are all the time trying to save on small items as well as on large ones. Ten per cent saving of this class of expense would be nearly $26,000, — enough to build a mile of branch-line railroad in certain parts of North Dakota. If the 30,000 employees of the Northern Pacific, by energetic work and careful use of material, saved only one cent a day, it would amount in a year to $109,500, — enough to buy five good locomotives. If the great army of railroad employees in the United States, more than 1,500,000, should save, by careful, thorough work, one cent a day, the total would be the large sum of $5,475,000. A freight locomotive, suitable for handling the grain-crop, costs,

delivered at Fargo, a little more than $21,000. The average receipt to the railroad for hauling grain from North Dakota points to the Head of the Lakes or the Twin Cities is 15 cents a hundredweight, or 9 cents a bushel, — say 10 cents for ease in calculation. To buy a locomotive requires the gross earnings to the railroad for handling 210,000 bushels of wheat, which at 13 bushels to the acre means 16,150 acres.

The capital requirements of railroads, if they are to keep pace with the demands of the public, and provide safe, adequate, and regular service, will continue to be very heavy. During the five years from 1904 to 1908 investors added $4,167,554,569, or an average of $833,510,914 per year, necessary to add to and improve the railroads so that they could serve the public. It will require in the future from $600,000,000 to $1,000,000,000 a year for a number of years if the railroads are to grow fast enough to keep ahead of the growth of the country and the demands of the people. In providing this capital, the railroads have a

task fully as difficult and serious as that of the farmer in increasing his product one per cent per acre per year, and both tasks must be accomplished if we are to make the best use of our wonderful resources.

You cannot have a good railroad without good track and good equipment, and good men to maintain and operate that track and equipment. You cannot have good farms without good soil, which you have in these three states; good farm equipment, which you can get and should keep in good order; good men, who will use that soil and equipment by proper plowing and cultivation, by the selection of good, clean seed instead of poor, dirty seed, by intelligent combination of various crops and live-stock.

Sound public opinion can help both the farmer and the railroads in the important work of the farmer and of the railroad. It is important that fairness and consideration be shown to both: to the farmer, that he may have every encouragement and the assistance of the best agricultural education, scientific

research, and extension work, so as to produce a larger food-supply; and to the railroad, that it may help the general prosperity by being able to provide sufficient transportation when it is needed.

The people can have good farming and good railroading, but it means hard work and plenty of it. Men who stand off on one side and find fault, criticise, and embarrass those who are really doing the constructive work in the country, by numerous petty, foolish restrictions, are not helping, but are really hindering the work of better farming and better railroading, and the country will sooner or later wake up to this fact.

VI

AGRICULTURE, BANKING, AND THE CARRIER[1]

THE three agencies, agriculture, banking, and the carrier, are most important in our part of the country. Upon the wisdom and energy with which they are conducted, upon their coöperation each with the other, and upon the wise and fair treatment accorded them by the public through the forces of Government, depend their success and the continued growth and success of our great Northwestern country.

The American Northwest is a great empire, very young but very strong and full of opportunity for the best kind of human endeavor. Much has been done, and great has been the growth in the last thirty years, as some of these figures will show: —

[1] Address delivered before the Minneapolis Chapter of the American Institute of Banking, at Minneapolis, Minn., April 26, 1913.

States	Admitted to the Union as a State	Land area sq. miles	Area acres	Population	
				1880	1910
Minnesota	1858	80,858	51,749,120	780,773	2,075,708
North Dakota	1889	70,183	44,917,120	135,177	577,056
South Dakota	1889	76,868	49,195,520		583,888
Montana	1889	146,201	93,568,640	39,159	376,053
Idaho	1890	83,354	53,346,560	32,610	325,594
Washington	1889	66,836	42,775,040	75,116	1,141,990
Oregon	1859	95,607	61,188,480	174,768	672,765
Total		619,907	396,740,480	1,237,603	5,753,054

States	Railroad mileage		Banking capital (a)	
	1880	1910	1880 (b)	1912
Minnesota	3,151	8,669	$6,539,238	$ 67,338,460
North Dakota	1,225	4,201	555,363	18,427,504
South Dakota		3,947		16,838,792
Montana	106	4,207	382,700	18,834,517
Idaho	206	2,178	126,885	9,782,696
Washington	289	4,875	203,533	37,769,323
Oregon	508	2,284	640,657	25,945,979
Total	5,485	30,361	$8,448,376	$194,937,271

(a) Banking capital includes capital, surplus, and undivided profits.
(b) National banks only.

This American Northwest of ours comprises 21 per cent of the area of the whole United States, but has only a little more than 6 per cent of the population. The railroads have been active in providing facilities, and there are only 190 people to the mile of railroad as

compared with 382 people for the United States as a whole, showing that the railroads have been doing their share in the development of this region. The banking capital, from such figures as I have been able to obtain, is $33.88 per person for all classes of banks in the Northwest, and $18.00 for national banks only, as compared with $45.28 for all classes of banks and $18.98 per person for national banking capital for the whole country. The deposits in our banks are $941,935,000 — not quite 5 per cent of the total deposits in the United States of $19,663,857,000; and the deposit per capita in our part of the country is $164.00 against $214.00 in the United States as a whole. What a chance here for growth!

I have spoken of agriculture as the first of the great agencies the success of which is so vital to all, and in agriculture I include all forms of activity engaged in by the farmer. It is true that in Minnesota, Montana, Washington, Idaho, and Oregon lumbering is, and in the last four states for a considerable time will continue to be, a most important part of

the business of the people. It is also true that in North Dakota, Montana, Idaho, and Washington, mining furnishes a field for the employment of labor, capital, and brains, but upon the wise and efficient use of the soil depends, more than upon all else, the future prosperity of the American Northwest.

Consider for a moment some of the figures about people engaged in agriculture and the results obtained in the American Northwest.

	1880	1910
All land in farms (acres)	23,561,289	124,345,917
Improved land in farms (acres)	11,540,115	72,992,996
Land capable of being farmed and not in use (acres)	12,021,174	51,352,921
Number of farms	135,971	466,856

	1879		1909	
	Bushel	Value not available	Bushels	Value
Wheat	47,842,928	"	290,802,583	$267,708,909
Oats	32,919,797	"	252,593,225	96,305,612
Barley	5,048,623	"	97,253,571	47,696,131
Corn	17,020,707	"	130,004,006	60,400,992
Flaxseed	174,300	"	18,731,213	28,031,509
Total	103,006,355	"	789,384,598	$500,143,153
	Tons		Tons	
Hay and Forage	2,420,913		18,954,653	$111,154,653

LIVE-STOCK ON FARMS

	1880		1910	
	Number	Value not available	Number	Value
Cattle	1,607,915	"	7,150,802	$172,843,915
Horses	528,321	"	3,139,153	347,783,768
Sheep	1,885,490	"	13,078,131	65,923,572
Poultry (all fowls)	3,345,325	"	25,333,553	12,150,697
Hogs	672,315	"	3,572,890	32,972,560
Total	8,039,366		52,274,529	$631,674,512

ORCHARD FRUIT

1879 Value	$ 857,812
1909 Value	10,106,702

POTATOES

	1899	1909
Acres	276,242	479,024
Bushels	29,497,186	56,237,161
Value	$8,303,259	$19,706,596

These figures are interesting in showing the development in a term of years. When we look at them we are inclined to "pat ourselves on the back" and think we have done wonders, for the total value of all crops, not counting live-stock and its products, for the last census

year in the states comprising the American Northwest was $691,634,435. This is a very large sum of money, equal to $120 per inhabitant, but to only $5.50 per acre for all of the farms, and to $9.50 per acre based on the improved land in farms. Denmark, with a much more dense population of 183 to the square mile as compared with a little over 9 in the American Northwest, has so improved methods of work and of agriculture that the average annual value for the same classes of products for every acre in that little kingdom is $225.16. Because of the greater density of population, the production per person averages $65.33.

Something has been done in the direction of improving agricultural methods in this country, but these figures show how far behind we are in making the best and most productive use of our soil. Suppose that the yield per acre on improved farms only was one half of the average for the whole of Denmark, then the production from the soil in the American Northwest would amount to more than

$8,000,000,000 of value, instead of the present $691,000,000. The addition of this vast sum to the wealth-production of the country north and west of here would mean much to every farmer, every banker, every business man, and every railroad employee in the country.

These startling figures emphasize that there is a great responsibility upon the man engaged in agriculture in improving his efficiency, and also a responsibility upon all in seeing that hand in hand with the development of agriculture shall go proper development of the banking and transportation interests of the country.

How about the banking capacity of the American Northwest? The growth of the banks in these states from less than $9,000,000 capital in 1880 to $195,000,000 in 1912 shows clearly that this agency has been keeping pace with the growth of the country, and in the whole United States the growth has been from $825,000,000 in 1880 to $4,164,914,181 in 1912. To-day there are more than 3360 banks in the American Northwest, taking care of

nearly $1,000,000,000 of the people's money and helping the farmer, the business man, and the railroad employee carry on their daily lives. In the United States as a whole, the deposits have increased from $2,201,900,000 in 1880 to $19,663,857,000 in 1912. The banker in his business meets many people and has a chance to direct attention to the right way of solving some of the difficulties that confront the country.

What about the carrier? What has been accomplished in creating that agency? In our part of the country, the principal carrier for any distance is the railroad, and to a very large extent this is true in the United States as a whole. Without efficient railroads the country cannot develop any more than it can develop without efficient agriculture and safe and sound banks. Here are a few figures that will show what the owners of the railroad have done in producing a transportation machine to handle the people and products of the country:—

The American railroad system has been

created in its present form since the Civil War, and practically built and rebuilt within the last forty years. The railroad-owner has provided, in round figures, 250,000 miles of railroad, 370,000 miles of track, 62,000 locomotives, 51,000 passenger-cars, and 2,200,000 freight-cars. The fair present value of this tremendous piece of machinery is probably at least $18,000,000,000, and in keeping it in order and in operating it about 1,700,000 men are employed with an annual payroll of nearly $1,300,000,000.

The securities representing this value are held by hundreds of thousands of individuals, and also by insurance companies, savings banks and trust companies, hospitals, churches, and colleges; and the people as a whole have as vital an interest in maintaining the credit and prosperity of the railroads as they have in maintaining the solvency of the banks. It is stated on good authority, that the life-insurance companies doing business in the state of New York hold one eighth of the entire railroad-bond issue of the country. There are

about 20,000,000 policy-holders in these companies, and they are very much interested in the soundness of this great investment. There are 16,108 holders of Northern Pacific stock, of which 5675, or 35 per cent, are women, and presumably the same relation obtains in other large railroads.

This great piece of machinery handled last year 33,510,673,000 passengers one mile, and carried 267,313,687,000 tons of freight one mile. These figures are so vast that the human mind cannot comprehend them. But, if we assume that there are 92,000,000 people in the United States, it means that the railroads provided a trip of 364 miles and hauled 2905 tons of freight one mile for every man, woman, and child in the United States.

People from all over the world come to examine the American railroads and the American railroad system, and go away in wonder because the American railroads perform a greater service per mile of track than those of any other nation, at lower rates, and pay their employees higher wages.

The following are the average rates per ton per mile for handling freight in some of the important countries for the last years for which figures are obtainable: —

United Kingdom	2.33 cents
Germany	1.41 "
France	1.39 "
Russia	.95 "
Austria	1.45 "
Hungary	1.31 "
Denmark	2.16 "
Holland	1.32 "
Switzerland	2.91 "
United States	.741 "

And here are some figures for capitalization per mile of road: —

United Kingdom	$275,000
Germany	114,000
France	144,000
Russia, including Siberia	81,000
Austria	118,000
Hungary	67,000
Denmark	58,000
Holland	82,000
Switzerland	117,000
United States	60,000

And here are the average wages paid railroad employees per year: —

United Kingdom	$270
German Empire	388
France	260
Russian Empire	196

Austria	$277
Hungary	283
Italy	287
Switzerland	292
United States	733

People who do not study the figures often look upon the railroad as a great piece of machinery with an unlimited ability to obtain money in indefinite amounts for increasing its capacity and improving the quality of the service. The transactions are so large and the figures run into so many millions that the impression prevails that the railroads must be very rich, and that any failure or refusal of the management to do the things that people want done is due to an unwillingness and to a spirit of parsimony, when as a matter of fact it is because of the absolute inability of the owners and managers to obtain the money from any source whatsoever.

The equipment of the railroads alone represents at least $3,500,000,000, and that equipment must be maintained in good order, that it may perform the duty imposed upon it by the public. It must be improved in quality and

quantity year by year. The imagination of the people is fired by the building of the Panama Canal, and it is thought of as a great work; but the railroad equipment for the use of the people is worth at least eight times the cost of that canal, and the annual cost of repairing and replacing that equipment, about $446,000,000 in 1912, is as much as the cost of the canal. To maintain a high standard of equipment for the use of the American people is fully as important as to have the Panama Canal, and yet rarely is any suggestion made to encourage the railroads in the work they are trying to do and to help them to make a better use of that equipment or to obtain rates that will enable them to have adequate facilities and adequate equipment for the fast-growing business of the country.

The railroads are struggling all the time to perform their work with less loss and damage to life and property, and few people not in the business realize the vast capital expenditures that should be made in order to equip the railroads with modern safety appliances that help

to prevent accidents. Such appliances will not entirely stop accidents, because in the last analysis the human equation is the test, and not until public opinion holds to a rigid account railroad officers and employees who are unfaithful to their duty will accidents be minimized, in spite of all the appliances that modern science may adopt. Statistics show that about one twelfth of the accidents on the American railroads are due to causes that can be remedied by mechanical appliances for the protection of trains; the other eleven twelfths come from causes that are common to all classes of business.

Much has been said about accidents in this country, as if we were very far behind other countries in this respect. Look at the figures for a moment: —

In Europe, on 206,987 miles in 1910 there were killed 554 passengers, 2607 employees, and 4465 other persons, or a total of 7626. In the United States on 248,888 miles reported in 1912, there were killed 318 passengers, 3235 employees, and 6632 other persons, or a

total of 10,185. Included in the figures for the United States were 5434 trespassers, and it is well known that in most European countries the public realize they have no right to trespass on railroad property, while in this country, except in a few states, people think the railroad right of way can be used as a highway, with the result that there are about 14 trespassers a day killed in the United States. These trespassers not only lose their own lives, but endanger most seriously the lives of the employees and passengers on the trains.

Absolute obedience is not encouraged enough in American education or in the American home, and in spite of everything that railroad managers can do, it is very difficult to secure absolute obedience to reasonable rules.

Nearly $300,000,000 is needed to install suitable block signals on the American railroads, which means an annual charge for maintenance and depreciation of about $75,000,000.

The revenue of the railroads is collected in the main from the handling of property and passengers, and they cannot pay out more than

they take in. In 1912, of every dollar that the railroads received, the following disposition was made: —

Labor direct	44.17	cents
Fuel and oil, 70 per cent labor	8.93	"
Material, supplies, and miscellaneous expenses	14.06	"
Loss and damages	2.20	"
Taxes	4.21	"
Rents for leased roads	4.41	"
Interest on debt	13.43	"
Total	91.41	"
Balance	8.59	"
	100.00	"

Of this balance 3.75 cents was for betterments and deficits, and 4.84 cents for dividends. In other words, of the dollar collected there had to be paid out 91.41 cents for those things that were absolutely necessary for maintaining and operating the property and paying taxes and interest, leaving only the small balance of 8.59 cents for improvements and dividends.

Without effective banking the great railroad systems of the country could not have been developed to the extent that they have been, and one of the great problems confronting the

carriers to-day is that of making both ends meet, and having enough money left over so that bankers will be able to obtain from investors new funds to increase the facilities. It is a matter of common knowledge and evident in the lives of all of us that expenses and the cost of living are greater to-day than a few years ago, and the same causes that affect the individual affect the great transportation companies. The demands of labor, the increased cost of material, ever-growing taxes, many new federal and state laws unnecessarily increasing the payroll, requirements of prosperous people for better service, all tend to increase the railroad expense, but so far with no increase in rates. As a result, the balance left to pay a return upon investments is not the amount that it should be to enable the banker to say to his client, "Lend me your money, that I may furnish it to the railroads so they can go on with their work."

Figures compiled from the reports of the Interstate Commerce Commission for the fiscal years 1907 and 1911 are given below: —

	1911	1907
Cost of road and equipment...*	$14,984,796,837	$12,940,379,220
Revenues	2,852,854,721	2,570,795,058
Expenses	2,005,528,462	1,737,698,201
Balance	847,326,259	833,096,857
Taxes	102,657,157	79,640,013
Operating income	744,669,102	753,456,844
Increased cost of road compared with 1907	2,044,417,617	
Decrease in income	8,787,742	

* Cost, taken from balance sheets, is far less than present real value.

In other words, with $2,000,000,000 new capital put into the business there was nearly $9,000,000 less return. How long will people go on putting money into a business that makes no return on the new capital required?

In 1900 the value of farm property in the States of the American Northwest was $1,843,409,554, and in 1910 it was $5,436,255,070, an increase of 194.9 per cent.

	1900	1910
Minnesota	$788,684,642	$1,476,411,737
North Dakota	255,266,751	974,814,205
South Dakota	297,525,302	1,166,096,980
Montana	117,859,823	347,828,770
Idaho	67,271,202	305,317,185
Washington	144,040,547	637,543,411
Oregon	172,761,287	528,243,782
	$1,843,409,554	$5,436,256,070

The capital value represented by agriculture in the United States for 1910 was estimated at $40,991,449,000, and the returns from agriculture for various periods are: 13.8 per cent in 1890; 16.3 per cent in 1900; 16.8 per cent in 1905. The farmer of the American Northwest has prospered as much as in any other section, and his property has increased largely in value, and presumably he has made as handsome a return on that value as for the average of the United States.

The capital, surplus, and undivided profits of all the banks of the United States for 1912 are given as $4,164,914,181. The net earnings in the same periods for national banks, and not including state and private banks, which are said to do as well, if not better than national banks, based on capital and surplus, were 6.66 per cent in 1880; 8.63 per cent in 1890; 8.20 per cent in 1900; 9.67 per cent in 1910. Or, if based upon capital alone, the net earnings were: 8.36 per cent in 1880; 11.48 per cent in 1890; 11.60 per cent in 1900; 16 per cent in 1910.

The capitalization of the railroads in 1910, represented by securities in the hands of the public, was $14,338,575,940. The return on capital invested in railroads was investigated carefully by the Railroad Securities Commission, with President Hadley of Yale at the head, whose report was sent to Congress by the President on December 8, 1911. What the Commission says in that report tells the story:—

"Neither the rate of return actually received on the par value of American railroad bonds and stocks to-day, nor the security which can be offered for additional railroad investments in the future, will make it easy to raise the needed amount of capital. The rates of interest and dividends to outstanding bonds and stocks of American railroads is not quite four and one half per cent in each case."

And again:—

"A reasonable return is one which, under honest accounting and responsible management, will attract the amount of investors' money needed for the development of our rail-

road facilities. If rates are going to be reduced whenever dividends exceed current rates of interest, investors will seek other fields where the hazard is less or the opportunity greater."

To quote again from this report: —

"The necessary development of railroad facilities is now endangered by the reluctance of investors to purchase new issues of railroad securities in the amounts required. This reluctance is likely to continue until the American public understands the essential community of interest between shipper and investor, and the folly of attempting to protect the one by taking away the rewards of good management from the other."

The evidence all indicates that the returns upon capital invested from both agriculture and banking have been much more attractive to the investor than have the returns upon capital advanced to the carrier, and the Securities Commission points out very clearly that the returns upon railroad investment are not enough to attract the needed capital.

I have tried to give you a few of the im-

portant facts about agriculture, banking, and the carrier,—the A, B, C of the alphabet of progress in the American Northwest. If these three agencies are not efficient and progressive, then there will be indifferent progress in merchandising, in manufacturing, and in the development of the more complex forms of human effort that do not flourish until there is some surplus of brains, energy, and capital over and above the imperative needs of the simpler forms of business.

Following, and to some extent coincident with the success of, this A, B, and C, come the things every man works for, and hopes for,—better homes, better care of women and children in schools, hospitals, and churches, and better facilities for the general welfare and uplifting of society. We all of us want these things, and we all want agriculture, banking, and the carrier to go on with their work, and to succeed. The practical question is, What can any one of us do to help out, that we are not doing?

It is gratifying that the country generally is

awakening to the fact that agriculture is an occupation that needs the best attention and the best brains that can be given to it. Too long has the farmer's life been pictured as unattractive, unremunerative, and something that the young men and young women should shun. Lately, however, the Government, the bankers, the carriers, and people generally have awakened to the fact that it is important to improve living conditions on the farm and to increase the productivity of the farm. Progress has been made, but much remains to be done to help and encourage the farmer and his family and to increase the product from each acre.

For many years the attention of thoughtful men has been directed to our monetary policy, and the mantle of government protection has been thrown around our banking methods, and every reasonable effort made to safeguard that important business. There are some weak spots in our system which it is hoped will be cured in due time.

The third great agency, that of the carrier,

has for forty years struggled to create a good transportation machine, much of the time without helpful support from either the public or the Government, and of late years in the face of restrictive and harassing legislation. That the business has succeeded to the extent that it has, has been due to the wonderful growth of the United States, which has carried forward all classes of business to a fair, and in some cases a high, degree of prosperity.

Now a problem is confronting the American people that is just as important to their future welfare as is the success of agriculture, or of our monetary system. When the silver question was rampant, many people said they did not care about that, because it was a question for the bankers, and it did not affect them; they learned later on, however, that the policy of our financial system affected every man from one end of the country to the other. Many people say now that in some miraculous way the railroads are going to provide all the facilities that are necessary for the expanding country, and that it is their business to get the

money, spend it, and have adequate facilities. The inability or failure in providing these facilities will sooner or later affect every one from one end of the country to the other, and it is just as much to the interest of the farmer, the banker, and the business man to see that fair treatment is accorded to the railroads, so that money will be attracted to that business, as it is to have sound agricultural practice and a sound banking policy.

There is one feature of railroad-operation that is not often considered, and that is the question of manning this great machine. There are many high-minded, earnest men in all departments of railroad work who are giving the best that is in them in trying to do their duty to the owners of the property and to the public. It is an unfortunate fact, however, that of late years young men in the United States who are fortunate enough to be trained in the best schools and colleges for business and professional life, and who have the liberty of choice in selecting their life work, do not select the transportation business, so that the

supply of trained railroad officers is not as great as it should be for the magnitude of the business. Experienced men of high character in the management of the railroads give confidence to the investor and to the public, and they are more important than money, engines, tracks, and physical facilities, if progress in the right direction is to be made. It is very much to the interest of the future growth of the United States to have the railroad business offer such rewards to the investor that money will flow freely into building up the transportation machine, and to offer such attractions to the best talent of the country, that men will engage in the business as freely as they engage in banking, in law, in medicine, in manufacturing, and in agriculture.

There is the closest connection between the railroads and the bankers, because the railroads must turn to the banking fraternity to help them in getting funds to carry on the great work of providing sufficient transportation. Is it not to the interest of bankers to try so to shape public opinion that not only will the

particular business in which they are engaged receive fair treatment, and agriculture receive help and fair treatment, but the great business of the carrier will receive like encouragement and fair treatment, so that the capital now invested in that important business, and needed so much in the future, will receive a return sufficient to justify bankers in recommending and obtaining the funds to be used for expanding the facilities of this great country? I believe that it is, and that every one can do something in his own life to foster a better understanding and a saner public opinion about these questions so vital to all.

VII

TRANSPORTATION IN NEW ENGLAND[1]

On August 9, 1913, there was reprinted in the "Outlook" "A Little Catechism on Money." One of the questions asked is, "What are the things which are exchanged in modern commerce?" The answer given is, "Those essential things which are bought and sold, as we say, in modern commerce are food, water, clothing, shelter from inclemency of weather and climate, human intelligence or skill, and human strength or labor."

The writer of the catechism failed to mention one very vital element in modern commerce, namely, transportation, unless he included it under the general terms "Human intelligence or skill and human strength or labor"; all of which are needed of the best quality in order to produce the high-grade

[1] Address delivered before the Boston Chamber of Commerce, September 30, 1913.

transportation that in these modern days is so necessary to the health and prosperity of all, and that is so vitally necessary here in New England.

Professor James Mark Baldwin, in his book "The Individual and Society," says, "Business has to do with the production of and distribution of valuable things — money, utensils — anything for which there is a demand in society, on which society or some individuals of it set value"; and again, "To produce such things in response to the demand and to distribute them to those from whom the demand comes is the undertaking of business." The transportation, or the distribution, of the numerous products of New England and of her food and fuel is a most important business, not only in itself but in its relations to all other forms of business and to society generally. Some of my friends in New England, New York, and Philadelphia have asked me to come back to the East and to help in the development of this great transportation business, and I am very glad to come, although I realize

that I am taking up a heavy load and trying to solve a difficult problem.

My experience for thirty-three years has been west of the Mississippi River, where some of the conditions are very different from those in New England, but where some are much the same. At points in the West there are complicated and congested terminals, — Chicago, St. Louis, Kansas City, Omaha, Denver, St. Paul, Minneapolis, Duluth and Superior, Spokane, Portland, Tacoma, and Seattle. In places the trackage is insufficient for the number of trains moving over it. There are branch lines that cannot earn enough to pay expenses, to say nothing of taxes and a return on their value. There is complaint, and discussion in communities about facilities, rates, and service. All of these conditions exist in New England.

The growth that has come and is coming to that great area west of the Mississippi River will have a reflex action and a great effect on New England, and there are certain facts that are most interesting. Minnesota, where I have

lived for the past ten years, is a beautiful State with many natural resources. It is large enough to include within its boundaries all of the New England states; in that state the last census reports 2,075,000 people as compared with 6,550,000 in the New England states. The beautiful states of Idaho, Washington, and Oregon, only just beginning their majestic development, have an area of 250,000 square miles and less than 3,000,000 people. Austria-Hungary has 261,000 square miles and nearly 50,000,000 people. Minnesota, Idaho, Washington, and Oregon are capable of supporting, in due time, as dense a population as New England, and New England can support as dense a population as Austria-Hungary.

What does this mean? It means that the West must and will grow, but it also means that New England must and will grow. A virile, prosperous, and happy people in the Mississippi Valley and between there and the Pacific Coast means an increasing purchasing power for those things that New England makes, and an increasing demand upon her

intellectual and financial capacity. With the growth of New England every agency that is connected with and necessary to that growth must grow too. It means an increasing number of her sons and daughters to return each year to her schools and colleges, and to enjoy her beautiful seacoast, lovely valleys, and picturesque hill and mountain country.

When I decided to come back to my old home in New England, some of my friends said, Why leave this great and growing West for a country that is developed and finished? I told them that in my judgment there was going to be just as much growth and development in New England in the next twenty-five years as anywhere else, and there will be if the intellectual and financial ability of the men in New England can coöperate unselfishly with that end in view. I told them that I had a great love for New England, and that, strong as was my feeling for the West, the idea of spending the last years of my life here, where my relatives and lifelong friends are, and

where my children are going to school and college, appealed very strongly to me.

There is an old saying that reads: "Man's work lasts till set of sun; woman's work is never done." This is true about the railroad. Its work is never done. Men may think they have provided sufficient transportation facilities for years to come, but the growth of the country is so great that things that looked far too big a few years ago are far too small now. For every dollar of gross earnings produced by the railroad there is a value in the plant used of nearly $6 upon which owners are entitled to a fair return. For every increase of $1 in gross earnings which reflects the increase in general business in the country there must be provided by some one more than $6 of new capital for increased and improved facilities. For New England to grow as she will in common with the rest of the country she must have a comprehensive, adequate, and safe system of transportation. The new capital needed in this section for each increase of $1 of gross earnings will be greater than the average in the

United States because of more perfect and luxurious service demanded.

As indicating the large sums needed by the railroads in the United States, it is estimated that nearly $700,000,000 will be required to replace wooden cars with steel; to equip the railroads with suitable signals will cost nearly $300,000,000; or nearly $1,000,000,000 for these two moves in the direction of safety; and in addition a great amount of money should be spent for better track, bridges, stations, grade-separation, etc.

To have a safe, adequate, and smooth-running transportation machine in New England is just as important to her future growth as to have adequate banking facilities, adequate commercial organizations, and a sensible, sane, and honest public opinion that will be reflected in a government that will not be swayed by the whims, prejudice, or fads of the moment. To perfect that transportation machine, to keep it ready to serve, to operate it safely and economically and in harmony with the public, is a very interesting and com-

plicated problem, worthy of the best intellectual effort of any man.

It was my good fortune to work for twenty-three years on the Chicago, Burlington & Quincy, first pushed out into the West by one of the pioneer railroad men of the world and one of that fine type of men of whom New England has produced so many, — John Murray Forbes. And then, later on, that road was further developed to a very high degree by another very fine type of New England man who had one of the ablest intellects in this country and who devoted forty years of his life to the work, — Charles Elliott Perkins. He realized to a very remarkable degree the fact that, in the long run, the railroad that is selling transportation and the people who are buying transportation must consider the interests of each other and work together. He also realized that character, high purpose, scrupulous honesty, not only as to money but as to statement and point of view, were absolutely essential to the real welfare of the country and of the railroads that were trying to serve it.

Yet, with all this, he was tenacious and able in safeguarding the rights of the owners who had risked their money in building railroads, and he pointed out on many occasions the fact, stated by Professor Baldwin, that the distribution of products or things was business just as much as the production of things was business. Some of the difficulties and inadequacies of the transportation machine of the United States to-day are the result of drifting away too far from the idea that transportation is business, which, in the long run, must be governed by the same great human and natural laws that affect all human affairs.

In saying this I do not wish to be understood as meaning that there should not be supervision and regulation of the great public-service corporations, and that changing conditions do not make necessary changes in method and in law. But I do say that care should be taken not to have that supervision and regulation go so far that it practically takes the real power of management away from those who have invested their money in the business. So long as

they have their money invested, so long as they are responsible for the financial results, so long as they give adequate, reasonable, and safe service at rates that will permit of gross earnings sufficient to pay expenses, taxes, interest on debts, take care of depreciation and obsolescence, and pay a reasonable return to the owners, they must have the right to decide many important questions, particularly those relating to the details of service, the organization of the staff, and the rules and regulations under which the staff and employees must work to produce the greatest efficiency and safety.

A public opinion that will impress officers and men with the fact that reasonable rules and regulations in the interest of safeguarding human life and of efficient operation must be made and obeyed, and that swift punishment will be meted out to all, whether directors, officers, or employees, whether members of labor unions or not, who fail to respond to that public opinion, is of vital importance to the welfare of all. Sentiment of this kind and less

insistent demand for high speed will do more to insure safety than steel cars and automatic signals.

And then, after twenty-three years of service on that great C. B. & Q., and a close association with Mr. Perkins during a large part of that time, I was equally fortunate in working under and with another most remarkable man, who has made a lasting impression, not only on the Northwest but on the whole country, — James Jerome Hill. Mr. Hill has a peculiar faculty of being able to look into the future, of gauging the growth of the country, and of foreseeing how business will develop. He was the leader in promoting an idea that seems very simple, but was too long neglected and even now is neglected, namely, that the efficient use of the railroad and the elimination of waste in operating the railroad are absolutely necessary if, in a country as large as the United States and as populous and prosperous as it is and will be, food, clothing, and shelter are to be provided at a minimum investment of capital and at a minimum charge to the public.

Here in New England, as much as in any part of the country, the teachings and inspirations of these two great masters of the art of transportation are of vital importance. Here are the most complicated relations between the railroads and those that they are trying to serve. Here is the greatest necessity for the elimination of all waste and lost motion. Here, because of the extreme difficulty, both financial and physical, of improving and adding to the capacity of that machine, the most efficient use of the transportation machine is absolutely essential. Any man who has been fortunate enough to receive the benefit of training under and with these two men has had an experience of priceless value to him in doing his daily work.

During the last five years I have tried throughout the West to present the railroad side of the transportation question. Some have criticised me and said my motive was purely selfish and that all I was after was increased earnings for the railroads. These critics did not look quite far enough. It is true

I had that point in mind, as any honest trustee for other people's property should have. But I also had in mind a much broader consideration, namely, that the country can not attain its best growth unless the people can be made to see that adequate and safe transportation is absolutely necessary, and that it cannot be obtained through private ownership unless, under honest management, enough money is earned to pay approximately the same return to the investor as is received by investors in other classes of business in the same territory, and in addition lay up a fund to provide for bad times, when earnings are poor. If we are to continue to have privately owned railroads supervised and regulated by governmental authority, and if we are to avoid ownership by the Government, the owners and users of the railroads must all work together. Personally, I do not believe in governmental ownership in a country like the United States, where our political methods are still in need of improvement.

The policy of the Government, national and

state, during the last twenty-five years seems to have been to decide rate questions in the great majority of cases in such a way that rates were rarely advanced and generally were reduced, and to introduce rules, regulations, and methods that increased expenses. I am not contending at this time that this policy was and is wrong, or that control and restraint by governmental authorities should cease, although something could be said about that great question. I do, however, want to make a plea that coupled with restraint and control there should be protection to the owners of the securities. The commissions, both state and national, naturally feel the great pressure of the millions of users of the railroads for reduced rates and increased facilities. But if the rates continue to decline, or even remain on the present level, and if expenses are increased by higher wages and cost of materials, and by the introduction of different appliances and facilities more rapidly than the roads can obtain money, then there is but one result for some of the railroads of the United States, and

that is bankruptcy. This will naturally be preceded by a desperate effort on the part of the management to postpone that evil day as long as possible by stopping every improvement and betterment that can be stopped. I believe the commissioners who have such great powers realize their responsibility to the owners of the properties as well as to the users, and I hope earnestly that they will give practical evidence of their realization by permitting some advances in rates.

Should the commissions, federal and state, make a positive declaration that rates may be advanced so as to permit the properties to meet all of their obligations, pay a fair return to stockholders, and leave a balance for improvements, they will do much for the entire country and particularly for New England. Such a declaration will at once inspire confidence and give to existing securities a better standing than they now have, both here and in Europe, and will help to market new securities upon an interest basis more favorable than is now possible, with the uneasiness in the

minds of investors about the future net earnings of the railroads.

Let us look for a minute at a few facts about the great transportation machine made up of the New Haven and New England lines and associated properties. There are 7976 miles of railroad and 14,175 miles of track. Of the track 29 per cent is in Massachusetts, 20 per cent in Connecticut, 14 per cent in Maine, 13 per cent in New York, 12 per cent in New Hampshire, 6 per cent in Rhode Island, 4 per cent in Vermont, and 2 per cent elsewhere. (See Table A, page 227.) There are 3197 locomotives, 8088 passenger-train cars, 79,522 freight-train cars, and 3541 work-cars. These units of rolling stock, which aggregate more than 94,000, if coupled together, would occupy about 750 miles of track, or make an unbroken train which would stretch from Vanceboro, on the Canadian border in Maine, through Portland, Boston, and New York to and beyond Philadelphia. Then there is the marine equipment of 240 steamers, tugs, barges, etc. But this rolling stock is not standing still. Each

year the locomotives run about 80,000,000 miles, the passenger-train cars move 220,000,000 miles, and the freight-cars move 624,000,000 miles. The total mileage of these units of equipment is 2,500,000 miles per day, or more than 100,000 miles every hour.

These impressive figures are even more impressive when used as an index of service in carrying passengers and freight. Each year the New England lines and associated properties, including the steamboats and electric lines, carry 252,000,000 passengers, a number which is more than double the entire population of North America. Expressed in other terms, the New England lines hourly transport 30,000 people.

The figures for the volume of freight business indicate an immensity of transactions which few appreciate. Every year 78,000,000 tons of freight are carried, 9000 tons every hour. The complexity of the problem, however, is not indicated by the tonnage alone. In connection with its movement 13,600,000 waybills are issued. Each waybill, however, usu-

ally covers several items, and it is estimated that the number of freight transactions in a year is 44,000,000,—141,000 for each working day, or nearly 5875 for every hour of the day. Is it to be wondered at that some shipments go astray or that some freight is damaged?

The unusual character of the railroad business of New England is apparent when the returns for the New Haven road are compared with those for the entire United States. Considering all the railroads of the country as one system, two tons of freight are transported for every passenger. On the New Haven road alone, the ratio of freight to passenger business is reversed. That road transports only one third of a ton to one passenger. The passenger density of the New Haven road is more than six times as great as that on all the railroads of the country considered as a system. These figures show the marked preponderance of passenger business in New England. Through the Boston South Station alone 105,000 people pass daily. The passengers passing through

that one station each week equal the total population of Boston.

To have this great transportation machine work smoothly, with the fewest points of obstruction and interruption — the least amount of friction — and with the greatest harmony among all its constituent parts, means, in the long run, the furnishing of the best transportation service to the people of New England.

The operating revenues of all of the properties for the last fiscal year were in round numbers $155,000,000. The operating expenses were $112,000,000. Of operating expenses approximately $66,000,000, or 59 per cent, was paid in wages, — an average payment to each employee of about $700 a year. The remaining 41 per cent, or $46,000,000, was paid for fuel, supplies, etc., but a large part of it goes indirectly to labor engaged in the production of the materials purchased. This large payroll is an important factor to the communities served by the properties, as much of the money finds its way each month to merchants and

others. The total taxes paid by these properties was $7,640,000, a very substantial contribution to the funds for carrying on the government.

But the people of New England have other interests in their railroads. Not only is the railroad service a vital part of the social organization, but its earning power as well affects a large and widely distributed number of investors. The number of security-holders of the New Haven and New England lines and associated properties is estimated at 60,000. The great majority of them live in New England. Of the stock in the New Haven road, 36 per cent is held in Massachusetts, and the stockholders in Massachusetts constitute 48 per cent of the total. Connecticut holds 19 per cent of the shares, New York 32 per cent, and Rhode Island 3 per cent. Of the remaining 10 per cent, many shares are held by residents of New Hampshire, Vermont, and Maine. Of Boston & Maine stock, 88 per cent is held in Massachusetts by 66 per cent of the stockholders, and only 3 per cent of the shares are

held outside of Massachusetts, New Hampshire, and Maine. (See Table B, page 228.)

It is commonly believed that railroad stocks are concentrated in the hands of a few. That this is not true of the New Haven and Boston & Maine will be apparent when it is known that 43 per cent of the New Haven stockholders own only from one to ten shares each, and 38 per cent own from 11 to 50 shares each. With Boston & Maine stock the proportion of investors holding a small number of shares is even more striking. Those who have from one to ten shares comprise 60 per cent of the total shareholders; those holding from 11 to 50 shares make up 31 per cent; leaving only 9 per cent with holdings which exceed 50 shares each. Of the New Haven stock, 44 per cent is held by women and 15 per cent by trustees and guardians. Of Boston & Maine stock, 49 per cent is held by women and 14 per cent by trustees and guardians. (See Table B, page 228.)

To maintain and operate this great transportation machine requires the services of from

90,000 to 100,000 men (92,792 on last payroll). These employees and these investors are drawn from all walks of life. They are human beings with hopes and aspirations and joys and sorrows. The livelihood of employees necessarily depends upon the return from their labor, and this in turn depends upon the prosperity of New England and the railroads of New England. In a smaller degree the comfort and well-being of many investors depend upon the return from their investment, and this also depends upon the prosperity of New England and of her railroads. These investors and these employees, with their families, on a basis of four to one, make 640,000 people, or nearly one tenth of the population of New England. Should not their rights, comforts, and feelings be considered carefully in the current tempestuous discussion in regard to the New England railroads?

The stockholders of the three important New England railroads — the New Haven, the Boston & Maine, and the Maine Central — have selected forty-eight men to act as their

directors. (See Table C, page 230.) Of these, three sit on all three boards and eight sit on two boards. Of the forty-eight directors, forty-two live in New England, four in New York, and two in Philadelphia. Those who are also directors of the so-called trunk lines outside of New England are five in number.

These directors are interested in the welfare of the roads they represent, and of the country that those roads are trying to serve. They exercise the final powers of management, and can approve or disapprove the action of the officers, and can direct them. They cannot know all details, and they must rely largely on the reports and recommendations of the officers on whom rests the first responsibility of careful investigation of the problems of management. They demand that the officers give their undivided time and attention to the railroad business, and to working harmoniously with the patrons of the roads, the employees, and the public authorities.

It is difficult to obtain the material things needed for the upbuilding of a railroad, but it

is even more difficult to get men. No more important work faces the management than to create a staff of officers that can carry on this great work and have it so organized that when for any reason one man retires there is another to take his place. Equally important is the work of encouraging the great army of employees, of inspiring them with a feeling of loyalty to New England and to the railroad, and of making safe the conditions under which they work. Every effort will be made to build up a complete staff of officers and men from those now in the service and in New England, men who know the local conditions, and who will respond loyally to suggestions for the closest, most efficient, and most economical operation. These two pieces of work are even more important to the traveling and shipping public than to the owners, because the daily work of the railroad must be done, or people will starve or freeze, and business stop. This daily work cannot be done right if officers and men are harassed and worried.

All of us are animated with a high purpose

to do our full duty, and we have no desire for self-aggrandizement and self-glorification. Our reward will come, if, in time, this complicated machine can be adjusted so that it will run smoothly, without friction, pay a fair return to the owners, and become so much a part of the daily life of the public that no more attention is paid to it than is paid now to drawing water from a faucet or turning on an electric light.

Shall we not advance the interests of New England, and the peace, prosperity, and contentment of her people if we are careful to be temperate and accurate in our statements and criticisms of others, and if we try to follow the principle the patient Lincoln laid down when he said: "I do the best I know — the very best I can; and I mean to keep right on doing so until the end. If the end brings me out all right, what is said against me won't amount to anything; if the end brings me out wrong, ten angels swearing I was right would make no difference."

I have faith in the future of New England

and in the good sense and judgment of her people in arriving at the right conclusions when they understand and appreciate the real facts. I have hope that a better understanding of the railroad side of the problem will be brought home to the people, so that they can see the difficulties which directors, officers, and employees in the railroad service are trying to overcome, and that the people will realize the sincere spirit which animates these men to do the best they can with a difficult situation.

Man-fashion, we must take the situation as it is and carry the burden as well as we can. We must be thankful for the good things of the past, and try so to improve the situation that those who come after us will be thankful for some good work and not too uncharitable about the mistakes that will undoubtedly be made. We will try, however, not to make the same mistakes twice. It does not seem as if any positive beneficial results could be obtained by a lack of confidence and by continuous wrangling. If the people of New England

cannot trust their railroad management, and if the railroad management cannot trust the people of New England, a situation is created that is unfortunate now and more unfortunate for the future and for our children and grandchildren, because so much needs to be done in the developing and upbuilding of the New England States. I believe we can all trust one another, and I, for my part, will do all that I can, and see that the officers and employees of the various railroads do all they can to bring about that condition. Intelligent and wholesome criticism is asked for and expected, and such criticism is a spur to the management to be faithful to their trust and careful in their work.

There will always be differences of opinion between buyers and users of transportation on the one hand and manufacturers and sellers of transportation on the other hand, because buyers and sellers, in the nature of things, will not always agree about the price and the quality of the article or service furnished. In such cases I hope we can discuss the differences

calmly, without prejudice, without any disturbance to the transportation machine which is so delicately adjusted, and without any demoralization among officers and employees, because any disturbance of this transportation machine reacts in many directions. I hope that if we should be unable to agree among ourselves, we can arbitrate the matter in an orderly way before those tribunals and courts which have been created for such purposes.

Important complaints about the railroad generally arise from : (1) A desire of one person or community to have better rates or better relation of rates than some other person or community. These complaints are very difficult to handle, because the railroad must consider all persons and all communities, and is sometimes blamed unjustly for not doing something that one person or one community wants, when if it did so act it would do an injustice and invite other and more serious complaints from other persons or other communities. (2) A desire of persons or communities for improved physical facilities, better

cars, better stations, more and better trains, grade-separations, etc. These complaints can be adjusted only by expenditures of very large sums of money, which, of course, can be obtained only by earning it or by borrowing it. Borrowing cannot continue indefinitely unless the rates received for service are sufficient to pay all proper expenses, — taxes, interest, and a sufficient margin to permit some improvements to be made each year out of earnings and some return to the owners of the securities. It is, therefore, to the interest of every one to realize that while he, or the community in which he lives, would like to have his or its particular rate reduced, or its particular facility improved, nevertheless, in the interest of New England as a whole, the general rate-situation should permit earnings sufficient to meet the payments above described.

It is no disparagement of Theodore Roosevelt to say that for a part of his official life he seemed to be opposed to railroads and railroad methods as he understood them, and yet in one of his messages to Congress he used these

words: "It must not be forgotten that your railways are the arteries through which the commercial life blood of the nation flows. Nothing could be more foolish than the enactment of legislation which would unnecessarily interfere with the development and operation of these commercial agencies."

Recently, as a keen observer and student of public opinion, he seems to realize, as do many others, that there is danger that the people have gone too far in reducing the power of the railroads to make net earnings. He wrote a forceful article published in the "Outlook" of July 5, 1913, entitled "The Living Wage and the Living Rate." Two paragraphs in that article are pertinent to the New England railroad situation. The first is:—

"But it must be a cardinal principle in dealing with honestly built and wisely managed railways that the investor, the shareholder, is just as much entitled to protection as is the wage-worker, the shipper, or the representatives of the general public. Unless the investor finds that he is to get a fair return on his

money, he will not invest, and in such case not only will no new railways be built but existing railways will not be able to repair the waste, the wear and tear, to which they are subject, and will not be able to make needed improvements. All governmental action, whether by legislature or the executive, should be conditioned upon keeping in view this fact."

And again, referring to the advance in rates requested by some of the Eastern lines, he says: "In the concrete case before us it is for the Commission to determine with strict justice to all parties how the relative and often conflicting demands of the shareholders, the wage-workers, the shippers, and the general public can properly be met. I am not discussing — I have not the knowledge which would warrant my discussing — whether the rates should be raised. If the facts do not warrant a raise, then the raise should not be permitted; but if justice and the interest of our people as a whole demand a raise in rates, then that raise in rates should unhesitatingly be authorized."

In managing a railroad, just as in any other business, different kinds of talent and ability must be employed to safeguard the business, — engineering talent, operating talent, commercial talent, and financial talent. In a very large business the best talent should be employed and the going prices for such talent must be paid. The management of the New England lines wants to use the best financial talent it can find to help it in raising the money needed. It wishes to employ those bankers, no matter where they live, who can do the work. It would prefer to employ bankers in New York and Boston, who naturally want to help the development of the country and of the roads. The management of the properties will be more than pleased if New England bankers, banks, and investors will furnish their full share of the money needed now and in the future, and will assist in obtaining that money in the markets of the world.

If a business is stagnant and dying of dry rot, no new money will be needed and there will be no need of the help of the experienced

banker or financial agent; but if the business is to grow, especially if it is a public-service business, which must respond to the demands of the public for good service, new money over and above what can be obtained from earnings is needed at frequent intervals and in very large amounts. The greater the amounts needed, the greater the need of expert advice and financial aid of the very best quality, because by training and experience bankers know where and how money can be obtained. With proper aid from bankers the officers of the company will not have their attention too much diverted from the work of careful management, safe and efficient operation, and good service to the public. The United States Government, state governments, and municipalities all turn at times to the banker for his aid in placing their securities in the hands of small investors all over the country.

The complete development of New England's varied resources has not been accomplished. The day is not far distant when to a greater extent than ever before the unused

water-power will supply the energy to turn the wheels of factories now here and those which will come with cheaper power and adequate transportation. New England's farms must be repeopled, and a change is going on even now. Progressive farmers and immigrants from Europe are teaching a lesson which should be heeded, — namely, that agriculture and horticulture in New England can be revived and pursued with profit. In addition to this, more animals fit for food should be produced. Modern scientific methods, together with hard work, patience, and intelligence, should produce a greater proportion of the food which New England annually consumes. More and more is this region becoming the summer playground for North America. The more factories and industries, the greater agricultural development, the larger influx of visitors, all will mean more prosperity for New England, and for her railroads.

Boston and New England have a just pride in the harbor facilities here, and every reasonable step should be taken to build up this port

and to help the movement of business via this port. The growth of the country back of the port is the best guaranty for the success of the port. With the completion of the Panama Canal there will be a physical opportunity for vessels to clear from Boston direct to the Orient and to the Pacific Coast. Should capital be found that is willing to invest in steamer lines sailing between this port and other parts of the country and of the world, there will be no effort made by this management to discourage such investment. On the contrary, any movement that will help to market the products of New England, that will place them in greater quantities in the hands of the ultimate consumer, will receive support.

As a boy in Cambridge, it was my good fortune, with three other smaller boys, to spend one afternoon a week with the Rev. Samuel Longfellow. He read to us, told us stories, and now and then took us to see his brother, whose writings are so full of humanity and good sense. The epigram Longfellow emphasizes in "Hyperion" is applicable to the present

industrial and railroad situation in New England: —

"Look not mournfully into the Past. It comes not back again. Wisely improve the Present. It is thine. Go forth to meet the shadowy Future without fear, and with a manly heart."

New England has had a glorious past and has had a wonderful influence in the development of the whole United States. She has great influence and power to-day. Her loyal, public-spirited sons have always taken their full share of the work in solving the problems of the country. Her own industrial and transportation problems will be solved, and all obstacles will be overcome, if all will work loyally together for a greater New England, if all will exercise some of the self-denial and patriotism that Robert Gould Shaw displayed when he marched away to his death at the head of his troops, to serve his country first and his family and himself second. Let us all work for the best development of all New England first, and not be swayed too much by the local

or selfish interest of one community. The highest development and conservation of the resources of New England — country, town, and city, especially the country — will, in the long run, mean the best development for the particular community in which any individual may be interested.

TABLE A

DISTRIBUTION OF ROAD AND TRACK MILEAGE

NEW YORK, NEW HAVEN & HARTFORD, BOSTON & MAINE, MAINE CENTRAL, AND ALLIED PROPERTIES

SEPTEMBER, 1913

States	Road mileage		Track mileage	
	Miles	Per cent	Miles	Per cent
Maine	1,346.73	16.8	1,923.75	13.6
New Hampshire	1,174.22	14.7	1,697.45	12.0
Vermont	403.29	5.1	537.98	3.8
Massachusetts	1,882.82	23.6	4,144.90	29.3
Rhode Island	491.67	6.2	838.98	5.9
Connecticut	1,549.96	19.4	2,808.89	19.8
New York	925.04	11.6	1,863.41	13.1
Pennsylvania	53.66	.7	139.56	1.0
New Jersey	53.07	.7	106.14	.7
Quebec	90.59	1.1	109.42	.8
New Brunswick	5.10	.1	5.10	—
Total	7,976.15	100.0	14,175.58	100.0

TABLE B

CLASSIFICATION OF OUTSTANDING CAPITAL STOCK

NEW YORK, NEW HAVEN & HARTFORD RAILROAD COMPANY AS OF JULY 1, 1913

	No. of shares	Per cent	No. of shareholders	Per cent
Massachusetts.....	571,009	36.29	11,481	47.90
Connecticut.....	306,766	19.54	5,682	23.70
New York.....	495,602	31.56	3,510	14.65
Rhode Island.....	47,606	3.05	735	3.07
Elsewhere.....	150,196	9.56	2,560	10.68
Total.....	1,571,179	100.00	23,968	100.00

BOSTON & MAINE RAILROAD COMPANY AS OF JULY 1, 1912

	No. of shares	Per cent	No. of shareholders	Per cent
Massachusetts.....	375,691	88.1	5,372	66.2
New Hampshire.....	17,543	4.1	1,446	17.8
Maine.....	19,158	4.5	622	7.6
Elsewhere.....	14,156	3.3	682	8.4
Total.....	426,548	100.0	8,122	100.0

TABLE B (*continued*)

Distribution of Shares [1]

Number of shares	N. Y., N. H. & H.	Per cent	B. & M.	Per cent
1 to 10 shares, inclusive	10,222	42.6	4,895	60.2
11 to 50 do	8,987	37.6	2,531	31.2
51 to 100 do	2,383	9.9	403	5.0
101 to 500 do	2,012	8.4	264	3.2
501 to 1,000 do	217	.9	15	.2
1,001 and over do	147	.6	14	.2
	23,968	100.0	8,122	100.0

Distribution of Shareholders

Stockholders	N. Y., N. H. & H. R. R. Co.		Boston & Maine	
	Number	Per cent	Number	Per cent
Males	9,008	37.9	2,742	33.8
Females	10,474	43.5	3,941	48.6
Trusts and guardianships	3,702	15.4	1,116	13.6
Insurance companies and other corporations	784	3.2	323	4.0
Total	23,968	100.0	8,122	100.0

THE TRUTH ABOUT THE RAILROADS

TABLE C

DIRECTORS OF THE NEW YORK, NEW HAVEN & HARTFORD, BOSTON & MAINE, AND MAINE CENTRAL RAILROADS

SEPTEMBER 30, 1913

	Residents of			Total
	New England	New York	Philadelphia	
New York, New Haven & Hartford Railroad	21	4	2	27
Boston & Maine Railroad	18			18
Maine Central Railroad	16		1	17
Total	55	4	3	62

Number of Directors serving on boards of the three Companies	3
Number of Directors serving on boards of two of the three Companies	8
Number of Directors serving on board of one of the three Companies	37
Total number of Directors	48

RESIDENTIAL DISTRIBUTION OF DIRECTORS

Massachusetts	12
Connecticut	15
Maine	9
New Hampshire	5
Rhode Island	1
New York	4
Pennsylvania	2
Total	48

VIII

PUBLIC OPINION: ITS EFFECT ON BUSINESS[1]

In the preface to his friendly volume "The United States in the Twentieth Century," M. Pierre Leroy-Beaulieu, one of the keenest of foreign observers of conditions in the United States, and a noted economist, uses this striking language: —

"Moral worth, which includes the recognition of duties as well as of rights, self-respect, and respect for one's fellows, has contributed, fully as much as the magnificent resources of their country, to the brilliant success of the American people. Of the qualities that have coöperated to elevate them so rapidly to such a commanding position, the most impressive is a great, a tireless energy. Now that the obstacles raised by nature have been overcome, now that the country is already so wealthy

[1] Address delivered before the Publicity Club of Minneapolis, January 10, 1912.

that the individual cannot always hope to see his efforts as richly compensated as was formerly the case, there is danger that this precious quality may be to some degree lost. It seems to me that the first care of the Americans should be to maintain it in all its integrity. The essential condition to the development of energy is liberty. Every restriction on liberty, with however good purpose, diminishes the individual responsibility and initiative. Yet we often hear mooted in America, as elsewhere, measures which, under the pretext of correcting abuses, would immeasurably extend the state's field of action, and reduce the liberty of citizens. It is my earnest hope that the American democracy will reject such enervating proposals, and will remain true to the virile and liberal traditions that have insured the United States so wonderful a growth."

In this short space a foreign observer and admirer has placed his finger on one danger that threatens the American people to-day, namely, the tendency to take away by *law* the freedom of action of the individual and to

attempt to shift upon numerous and often half-digested laws burdens that the individual himself should carry, and to try to solve problems by *law* that public opinion should settle, — based on a few of the great fundamental laws of life that no legislature or commission can change.

M. Leroy-Beaulieu is right in declaring that a tireless energy characterizes the American people, and the economic progress of the country has been so rapid as to astonish foreign students of American social and business conditions. It has wrought great changes in our methods of business and of living. The average American enjoys luxuries and conveniences which were not dreamed of twenty-five years ago, and the inventive genius of Americans is daily placing in the hands of every man new and improved tools with which to do his work. Our prosperity has increased the complications of government, and the close attention given by our people to business has resulted in less personal attention to public affairs, about which there is not the feeling of interest and responsibility that characterized

the American people when there were fewer people and less wealth.

The average American must realize that with a more complex civilization and government the duties that devolve upon him individually are more important than before. He must take a broader and better view. He must not consider the law a crutch to take the place of a direct and personal responsibility that our system of government places upon him. He should realize that he is one of many who make government in this country and determine whether it shall be lax or efficient. The law is only the expression of the sound public opinion of many individuals.

During a hundred years Americans have taken a pride in the extent of the country, in its great natural wealth and resources, in its development, and in the large machinery of business and industry that has grown up under their hands. We have been proud that we are big; so much so that we have exposed ourselves sometimes to the smiles of foreigners, who have thought us boastful.

It is related that a French business man accepted the invitation of a prominent man of that city to visit Chicago. The two started from New York and began to talk about the rapid development of the country, and the visitor remarked: "You Americans are a boastful people. I will wager a sum of money that before we have been in Chicago thirty minutes, at least two of your fellow-citizens will have proven it to me." The wager was made. Upon alighting from the train the Chicago man met a friend and introduced his guest. Almost in a breath the friend saluted the French visitor, and urged him to visit the stockyards at once, because "they are the largest in the world!" Fifteen minutes later, at a club, the Frenchman won his wager, when a prominent merchant invited him to tour the business district in an automobile and see the "greatest commercial center in the world!"

Such pride is natural in a people who have done great things in a short period of years. Our commerce is great, and our trade extends to the corners of the earth,— the product of

a hundred years. Our transportation system, with a capitalization which is the lowest in any civilized country in the world, with the lowest rates, and with the highest efficiency of service and ability to meet the demands of business, is second to none. An elaborate system of public education has been built up, and is aided by many universities and schools created by private gifts, which rank with the best institutions of learning in other countries. In the common things of life, corresponding progress has been made, and the average American lives better, profits more from his labor, and has greater opportunities of advancement than the citizen of any other country.

In all this wonderful progress, there is one weakness which many Americans realize. Our progress has been largely material, and public opinion has been busy with purely material things. In transportation, business, invention, and the spread of learning, our achievements are equal to or superior to those in foreign countries. What we have done in one hundred years is due largely to the tireless energy,

individual responsibility, and initiative spoken of by M. Leroy-Beaulieu. If we turn to our national life, the welfare of which is dependent upon the degree of personal responsibility felt by the average citizen, a less favorable result comes to our attention. There are defects of political and governmental machinery which are apparent to every one. Efforts toward better standards are made, yet there are still preserved, in the methods of government in most of the cities of the land, customs and practices which are not thorough, efficient, and economical, or equal to the methods insisted upon in ordinary business. In private business affairs the progress toward genuine efficiency is more rapid than in national, state, or municipal government. This may be attributed to the lack of a vigorous public opinion insisting that a man in the service of the public shall work just as long and as hard as the man in private business.

The American people are divided in their views about present conditions. The ultra-conservative are content to watch their in-

come grow with not much thought of public duty. The sentimentalists and the radicals, actuated more by the heart and self-interest than by reason, declare that all things are wrong and that we must tear down and begin over again, introducing doubtful principles and ideas often obsolete and unpractical. It is probable that the true view is between these extremes, — that there is sound public opinion in this country, but that it is not making itself felt as it should, because the pressure of material things and personal interest prevents proper expression of it. Society as a whole needs a stronger sense of personal responsibility, creating a foundation upon which a really sensible and constructive public opinion may be built.

Few people realize the number of men in this country entitled to vote who fail to do so. In 1900 there were in the United States 21,329,819 males of voting age, or potential voters; and there would be some increase each succeeding year, and yet the vote for President was in 1896, 13,827,212; in 1900, 13,970,134;

in 1904, 13,524,349; in 1908, 14,887,133; or about 35 per cent not voting. This is certainly not a good showing of interest. Public opinion should arouse people to take more interest in selecting the men who are to make and administer the laws that affect their daily lives in many directions.

One result of this indifference and neglect is that there is a class described generally as "politicians," who make the laws — and make too many of them. That is their business, and the more elaborate the governmental machinery and the more laws to be made and unmade, the better for the "politician" and his friends, who are living at the expense of the rest of us because we are too busy to express our real views about matters of grave importance.

The disposition to try to adjust everything by passing laws is nowhere more strikingly shown than in the number of laws introduced into Congress. While the largest number of proposed enactments submitted to any American Congress, during the ten-year period end-

ing in 1909, was at the Sixtieth Congress, when 38,388 bills were introduced, the more deliberate and careful methods of the English are shown in the fact that the largest number of bills before any Parliament in that period, that of 1900, was only 621. Less than 2 per cent of the bills before the Sixtieth Congress became law, while 67 per cent of the bills proposed in Parliament in 1900 were enacted. During this ten-year period, our national Senate and House considered 146,471 different bills. During the same period the English Parliament considered but 6251 measures. The congressional "mill" added 15,782 measures to the law of the land; Parliament enacted but 3822 new laws. The figures in both instances include both public and private bills, and it should be added that Parliament considers and acts upon many subjects which are considered by state and municipal bodies in the United States.

The state legislatures for 1911 considered, as a part of new railroad legislation proposed, a total of 512 bills affecting the physical opera-

tion of railroads. These proposed bills related to hours of service, terms of employment, the kind of uniforms to be worn and other matters affecting employees, compulsory and voluntary arbitration, train rules, regulations for the operation of freight- and passenger-trains, equipment, car-supply, claims, signals, clearances, crossings, maintenance of tracks, and many details to which it would be supposed that the long experience and extensive knowledge of railroad managers under the varying conditions of business would be a better guide than the judgment of a legislative body, no matter how excellent its intentions.

Legislation that is a response to a real public opinion should not be objected to by any conscientious citizen. Such laws, backed by the will of the people, will be enforced. But the deluge of new laws that is dumped upon the country has the effect of weakening respect for the law, because too many laws prove unwise in practice, and are not enforced, with the result that too many people grow up with a lack of respect for law and order and do not

obey promptly those who have the right to give orders.

There is a very proper concern because of railroad accidents, and no one is more concerned about them than the railway owner and manager: they have the greatest incentives to avoid them, — pride in their profession, the natural desire of all men to prevent sorrow and suffering and the loss of money and reputation. And yet most accidents are due to three fundamental causes: *disobedience* by some one of a rule that if followed would have prevented the accident; *negligence* of some individual somewhere in doing his particular work, making the car-wheel, or rail, laying the track, inspecting the track, throwing the signal, etc.; *recklessness* among passengers and employees. This disobedience, negligence, and recklessness cannot be eliminated by law, but public opinion can have a marked effect upon it.

The lack of public opinion of sufficient weight to compel the enforcement of many of the laws passed in the United States is one of

the causes of our homicides. Every day of the year murders are committed somewhere in the United States. Many have tried to point out the reason. It is probable that several factors rather than one are responsible, and that they may be summed up in the laxity of public opinion and the consequent laxity of law and its administration. For this death-roll every individual of the American people should feel a responsibility. It is the lack of such public opinion that caused the Indiana Railroad Commission to make this sad comment in its accident bulletin issued in March, 1910: "Trespassers continue to pay the usual toll in blood for the fatal right to make thoroughfares of the railroads. If the railroad ties were three times as many, and were saturated with oil and burning all the time; if dynamite were placed on the track every ten feet, and people walked on the tracks, nevertheless the deaths would be no more certain than in a country whose laws do not prohibit such use of the tracks, and whose customs and carelessness of human life permit these astounding fatalities."

From 1901 to 1911, 50,708 persons lost their lives by "walking on the railroad tracks," — taking chances of death that were obvious. Add 54,183 more who were injured, and you have a total of death and destruction because the American people have not developed a public opinion upon this question that makes a person who recklessly takes such chances of death feel the opprobrium of his associates. Three pretty Iowa maids walked from Burlington to Chicago last autumn. Interviewed by a Chicago paper, they said: "Last Sunday we must have walked four hours on the road, though without seeing a soul. So we got back on the tracks, walking 'goose fashion' along the cinder path. It was n't long before trains were going by, the people waving their handkerchiefs at us. That was great fun." A railroad statistician posted on the death-roll among those who walk the tracks "for fun," adds the comment: "What's the use of signals, colored lights, or other forms of warning!"

The accident-record of the American railroads has often been made a weapon in the

hands of their critics, but the press and the public do not set forth clearly the true facts. From the total number of employees killed and injured must be deducted the number of casualties due to their own recklessness, carelessness, or willingness to take chances, of which Mr. William J. Cunningham in speaking in February, 1911, before the New England Railroad Club said: "American railway employees are proverbially chance-takers, and are not as amenable to discipline as British railway trainmen, who have a greater respect for authority and instructions. Americans are noted for always being impatient and in a hurry. These national differences in both passenger and employee bear a relation to accidents, indefinite to be sure, but nevertheless important, particularly in the 'chance-taking' by employees."

An analysis of the railroad accidents in the United States for the year ending with June, 1911, shows that out of 356 passengers who were killed, there were only 96 persons killed while riding on trains in accidents for which

railroads were probably responsible. In the same year the railroads handled more than 900,000,000 passengers. For 1909 the results showed that a passenger could travel 4000 times around the earth without being killed, or he could travel 60 miles an hour for 220 years without being killed! During 1908, 316 railroad companies hauled 455,365,447 passengers without the death of a single passenger in a train accident. In 1909 there were 347 railroad companies, hauling a total of 570,617,563 passengers, without a single accident to a passenger in a train accident. These figures cover a mileage of railway equal to that of the United Kingdom, Germany, and France combined, and present a record of immunity from fatalities among those who travel unequaled except in the United States in previous years.

Incomplete records for 1910 show that 156 lost their lives in automobile fatalities. The death-roll of the automobile for eleven months of 1911 was 257, more than two and a half times the death-roll of passengers in train accidents for which railroads were responsible.

One hundred persons met death by accident during the hunting-season of 1911, in the Northwestern States.

What a vigorous public opinion might do in diminishing the railway death and accident list is well shown in the remarkable figures of Fourth-of-July accidents which have recently become public. The death-roll from the celebration of this holiday was for years a matter of anxious concern to many. In nine years it meant 39,219 killed and injured. It was within recent years that the vigorous agitation for a "safe and sane Fourth" started. The figures for 1911 show but 57 killed, while in 1910 the death-list was 131 and in 1909 it was 215. Within a little more than two years' time a vigorous public opinion intervened between the American small boy and a time-honored method of celebrating a national holiday, changed the customs of a people, and reduced the death-list from 215 to 57.

The railway-owner may make a very fine physical machine, but when it is done it must be operated with all of its complications by

human beings, who are not perfect, and who make mistakes.

In our country of large distances and large cities, the question of feeding people and keeping them warm means that transportation must be regular, sufficient, and continuous. What would happen to New York or Chicago or Minneapolis if for one week all railroad transportation were abandoned?

The railway-owner may make rules and regulations and make effort to continue in business, but he cannot always do so unless public opinion in time makes it clear that when a man chooses as his means of livelihood work on a railroad, he assumes a duty to society as a whole to give absolute obedience to rules, and to remain at work until suitable arrangements are made to relieve him. So dependent is the welfare of the whole country upon regular transportation that in time public opinion will declare that men on a railroad have no more right to disobey reasonable rules than have the men in the army, have no more right to leave in a body than have the men in

the army. When they act thus in the army they are punished for mutiny and desertion. Probably no law could be framed at the present time that would cover these ideas, because it is contrary to our American ideas to say that a man shall or shall not work as he may wish. But public opinion would in time crystallize so that in some way strikes or industrial war would be things of the past, and men could only leave in a body by being mustered out in some orderly manner. We hear much about quasi-public corporations, and public opinion has gone a long way in taking away from the owner of public-service corporations the right to manage his own property, to name his own rates or prices, to decide about his methods, and has imposed on him the responsibility of providing safe and adequate public service from his private means, but so far has exerted little influence upon the men who have to make the quasi-public corporation of use to the public. If a man decides to work for a quasi-public corporation, he becomes a quasi-public servant, and he has a moral duty and

responsibility to society just as much as the owner has, to see that society is not deprived of the service necessary for its existence.

The railroad manager is hampered in obtaining absolute precision and reliability, not alone by the human equation, but by the operation of the force M. Leroy-Beaulieu points out. Over many of the employees his authority is divided with the labor unions, which exercise a powerful influence in determining the extent of the authority he is to be permitted to exercise over their members. To the unions he must look for acquiescence not alone in the rates of pay and terms of employment, but in the rules he makes, the authority he exercises over men charged with various duties, and the obligations under which a large number of men work. His power to cull his forces and discard not only the unfit, but those who do not demonstrate their entire capability, is limited.

The American people have corrected some of the errors in corporate management and realize that organized capital is necessary to

the welfare of the country, but that it must be controlled and regulated. Organized labor is a great force that makes for good or evil of labor and of society as a whole, depending on the wisdom and patriotism of the leaders. Most men want to work and support their families, but they fear the ridicule of their fellows and sometimes follow too blindly an unwise leader who may do them a real harm.

Public opinion at one time justified burning and torturing people because they did not follow the same religious practices as those in authority. In old Salem it justified hanging women who were thought to be witches. Less than one hundred years ago it justified one man's killing another in a duel because of some insult, real or fancied. To-day physical violence and social ostracism are still in practice toward those who do not wish to join a labor organization but who do wish to work. But public opinion will change and say to organized capital, "You must be fair to all." J. B.

McNamara, in his confession, said, "I did what I did for principle." It is only necessary for an aroused public opinion to speak out and show the unfortunate men like the McNamaras that the many good men in the ranks of labor and the many good men in the other walks of life will not stand for that kind of principle.

The transportation business, now trying to readjust itself physically to the growing needs of a great country which has developed rapidly, has been subjected to severe attack and criticism. That transportation is a vital part of commerce, and the greatest element, after agriculture, in business success, has been ignored. With other kinds of business it has felt public opprobrium, because an element of the people have revolted somewhat against alleged improprieties of the past. Railroads have had to struggle for existence, as have other forms of business. Their history is similar to the history of other forms of business of contemporaneous development, and their present critics, forgetting all that has been

done to bring the American railroad to its present high plane of efficiency, have been led into a somewhat unfair attitude.

Of the 609,994 miles of road in the world, which is the mileage as of 1908, nearly 40 per cent, or 233,468 miles, were in the United States. The railroad-mileage operated has grown from 159,272 in 1890, to 239,652 in 1910. The number of employees of railroads has grown from 750,017 in 1890 to 1,502,823 in 1909, and there are at least 1,000,000 holders of securities. These 2,500,000 owners and employees represent about 10,000,000 of our population, and their rights should be considered and protected just as much as those of other classes of people.

In the United States the railroads have lowered their rates, largely by voluntary action, about 25 per cent since 1888, but the tons of freight carried have increased 257 per cent, the mileage of freight-trains 80 per cent, and the average haul per ton in miles 14 per cent. The lowering of rates saves the shipper $1 out of every $4 he formerly paid, and on the ton-

nage moved by the railroads in 1910 effected the saving of $615,928,000.

As compared with $275,000 per mile in the United Kingdom, $109,788 per mile in Germany, $80,985 in Russia, $139,390 in France, and $112,879 in Austria, the capitalization of the railroads in the United States is smaller than that of the railroads of any country of the first class, and especially low when considered from the standpoint of comparative service to business, for in this country the citizens command the service of five miles of a railway to one mile that serves the average European.

The Railroad Securities Commission says in its report transmitted by the President to Congress, December 11, 1911:—

"Neither the rate of return actually received on the par value of American railroad bonds and stocks to-day, nor the security which can be offered for additional railroad investments in the future, will make it easy to raise the needed amount of capital. The rates of interest and dividends to outstand-

ing bonds and stocks of American railroads is not quite four and one half per cent in each case."

Public opinion must be exerted to see that railroads are fairly treated, so that the money needed for increased and improved transportation facilities can be obtained and spent rapidly and freely.

Every age has its problems, and we sometimes think that ours are different from, and much more difficult than, those that others have had to deal with. I read the following the other day: "The merchants form great companies and become wealthy, but many of them are dishonest and cheat one another. Hence the directors of the companies who have charge of the accounts are nearly always richer than their associates. Those who thus grow rich are clever, since they do not have the reputation of being thieves." This sounds familiar, as if it might have been said very recently, but it was published in the Chronicle of Augsburg, Germany, in 1512, four hundred years ago; so the modern reformer who

thinks business is all wrong, and that he has discovered the trouble and can remedy it, is somewhat behind the times.

The following also came to my notice: "It is impossible to limit the size of the companies, for that would limit business and hurt the common welfare. The bigger and more numerous they are, the better for everybody. If a merchant is not perfectly free to do business in Germany he will go elsewhere, to Germany's loss. Any one can see what harm and evil such an action would mean to us. If a merchant cannot do business above a certain amount, what is he to do with his surplus money? It is impossible to set a limit to business, and it would be well to let the merchant alone and put no restriction on his ability or capital. Some people talk of limiting the earning capacity of investments. This would be unbearable and would work great injustice and harm by taking away the livelihood of widows, orphans, and other sufferers, noble and non-noble, who derive their income from investments in these companies. Many merchants out of love and

friendship invest the money of their friends — men, women, and children — who know nothing of business, in order to provide them with an assured income. Hence any one can see that the idea that the merchant companies undermine the public welfare ought to be seriously considered. The small merchant complains that he cannot earn as much as the companies. That is like the old complaint of the common laborer that he earns so little wages. All this is true enough, but are the complaints justifiable?" This is from a report of a committee appointed by the Diet of Nuremberg to investigate monopolies, and they made their report in 1522. And the committee found then, as is true now, that they could not change the situation very much without doing more harm than good!

I read in the "Literary Digest" a few days ago four paragraphs which are said to represent the Chinese view of certain business practices. They read as follows: —

"Those who deal with merchants unfairly are to be beheaded."

"Those who interrupt commerce are to be beheaded."

"Those who attempt to close the markets are to be beheaded."

"Those who maintain the prosperity of commerce are to be rewarded."

The Chinese seem to recognize that injustice, interruption of business, and control of markets are undesirable things and that the expansion and growth of commerce is a good thing! They suggest pretty drastic remedies, which can hardly be followed out in this country; and they suggest rewarding those who expand commerce, while in this country the tendency is to condemn them.

Public opinion, however, in this country, if created wisely by the action of the true majority, can accomplish the desired results without beheading anybody. Public opinion can insist: —

That, in the schools supported by the public, children shall be taught the great importance of absolute obedience, continuous work, accuracy, and economy,

and that these habits are essential for any one who is to become a good citizen; —

That the press, supported by the subscriptions and advertisements of the public, and putting forth each year more than 10,000,000,000 copies, can, by telling the real truth in simple form, do much good to the country and in the long run make more money than by being sensational and yellow; —

That the great public-service and other corporations must be fair to those who need their service, but on the other hand they must receive fair treatment and a chance to make money, or they will not be ready to serve when the public needs them badly; —

That the honest, hard-working laboring man must be allowed to work, whether his convictions lead him to belong to a labor organization or not, and that labor organizations must be fair and square in their dealings with their members and with the public at large; —

That in the effort to correct abuses that may have developed in business life during the very rapid and really marvelous growth of this country, the tireless energy of our people should not be destroyed by crippling the development of individual responsibility and initiative; and —

That laws should only be made on complete knowledge of the real facts.

To create an enlightened public opinion, every one must contribute, and not leave the formation of that opinion to a small minority who make a great deal of noise but are not always very wise. Every one can do a little toward helping out.

Maltbie says: —

"We are not here to play, to dream, to drift;
We have hard work to do, and loads to lift.
Shun not the struggle; face it, 't is God's gift."

This is good advice.

THE END

UNIV. OF MICHIGAN,
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